

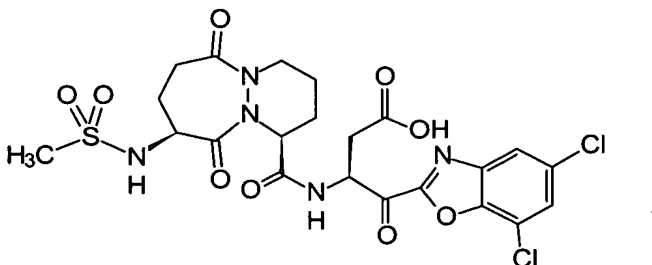
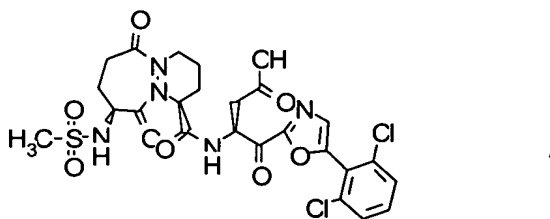
AMENDMENTS TO THE CLAIMS

Please add claims 154-160 as indicated below. This listing of claims will replace all prior versions, and listings, of claims in the application:

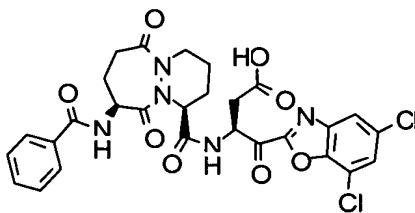
5 Listing of Claims:

1-37. (canceled)

38. (previously presented) The compound according to claims 62 or 68, selected from the group consisting of:



223e



i

O=C(O)C[C@H](NC(=O)[C@@H]1CCN(C1)C(=O)Nc2ccccc2)SCCc3cc(Cl)ccc3

1

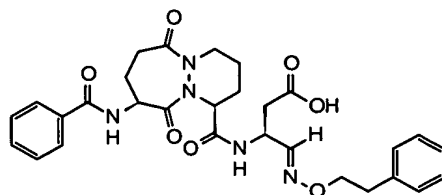
Chemical structure of compound 10: A bicyclic urea derivative. The structure features a 1,3-dioxane-2,4-dione core. One nitrogen atom is substituted with a benzoyl group (C₆H₅CO-). The other nitrogen atom is substituted with a 2-chlorobenzyl ester group (-CH₂CO₂CH₂-C₆H₄-Cl). A carboxylic acid group (-CH₂COOH) is attached to the bicyclic system via a chiral center.

;

O=C(NC1CC2C(=O)N(C1)CC2C(=O)NC(=O)NCC3C=CC(=C(C=C3)Cl)Cl)C4=CC=CC=C4

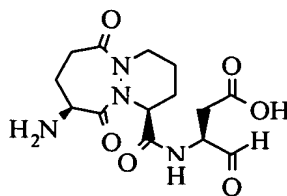
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307b



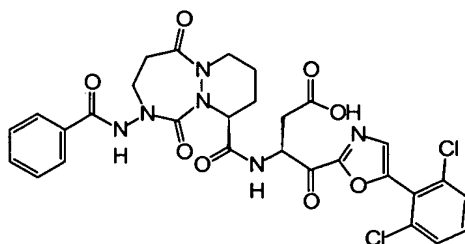
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429



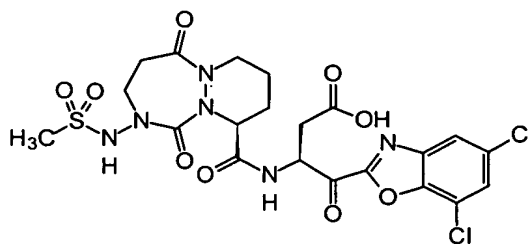
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820b



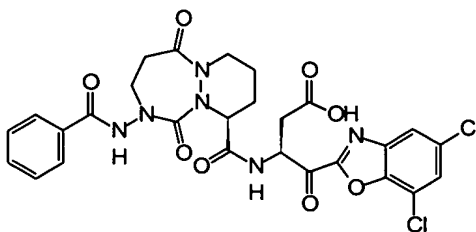
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823b



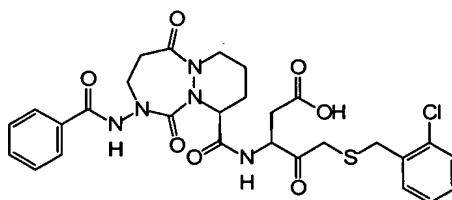
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823e



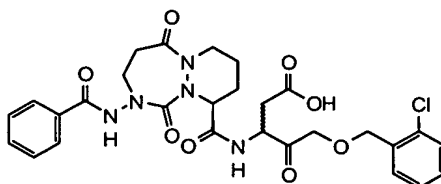
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826e



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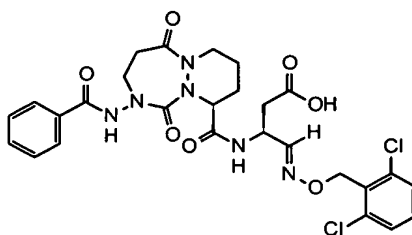
827e



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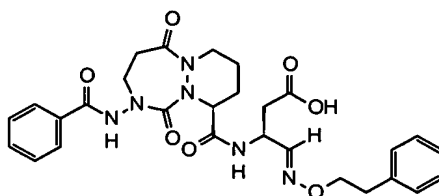
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907a



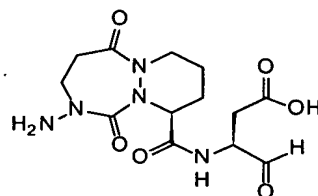
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907b



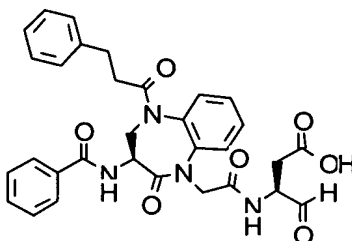
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1029



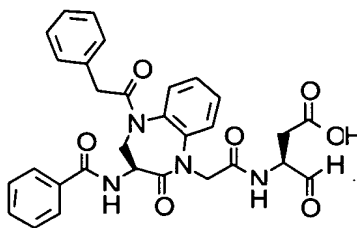
39. (previously presented) The compound
according to claim 62, selected from the group
5 consisting of:

605a



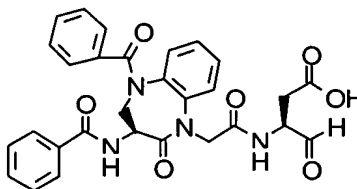
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605b



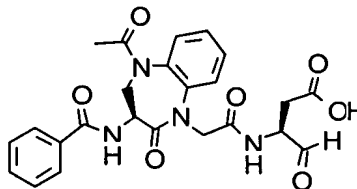
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605c



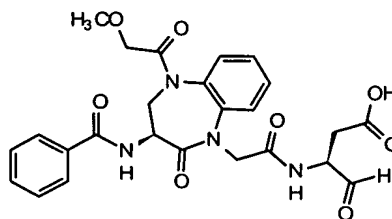
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605d



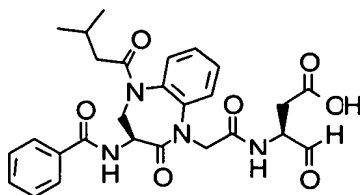
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605e

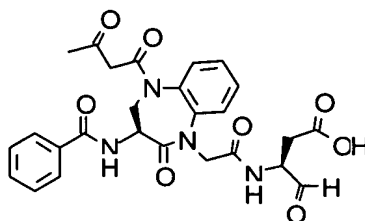


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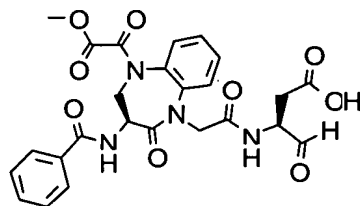
605f



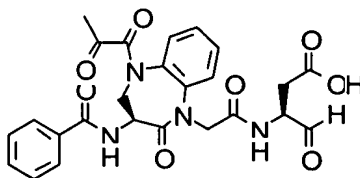
605g



605h

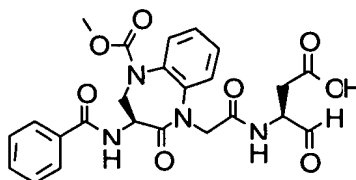


605i



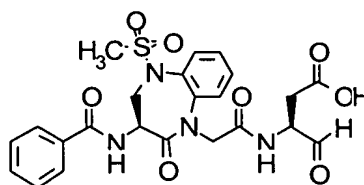
Application No. 10/058,522
Supp. Amdt. dated March 4, 2004

605j



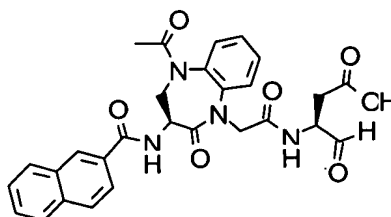
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605m

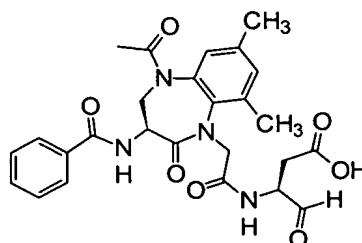


1

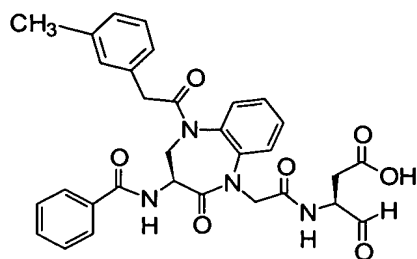
605n



6050

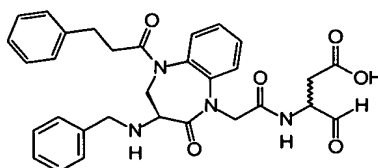


605t



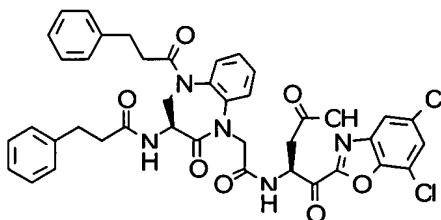
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605v



;

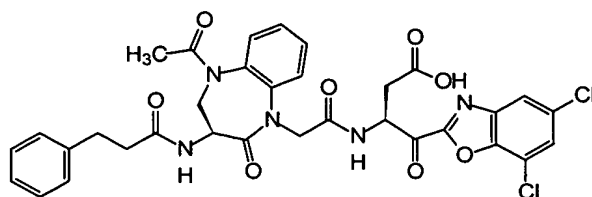
609a



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5

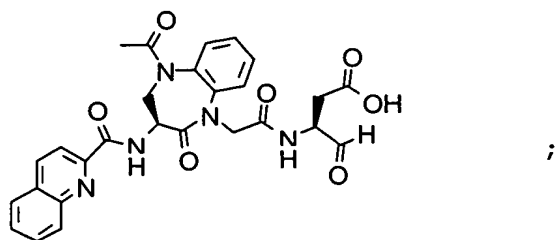
609b



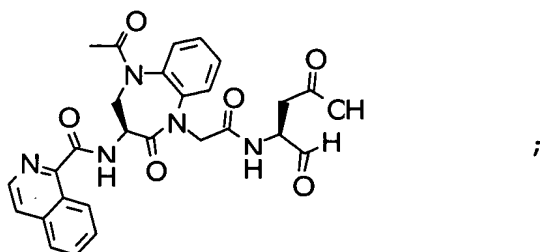
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Application No. 10/058,522
Supp. Amdt. dated March 4, 2004

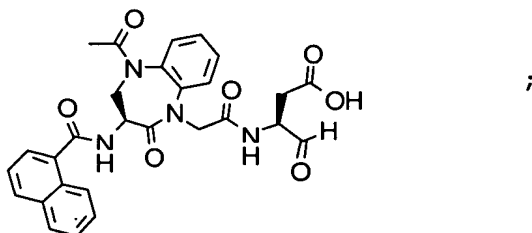
619



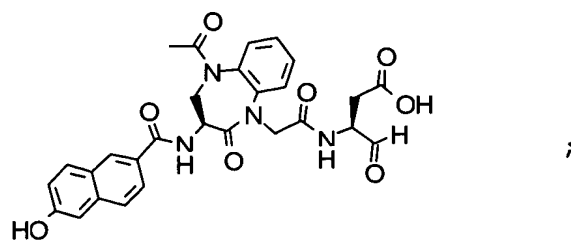
620



621

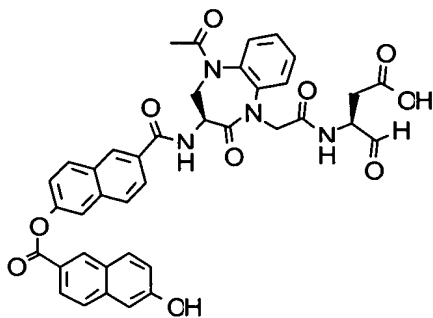


622

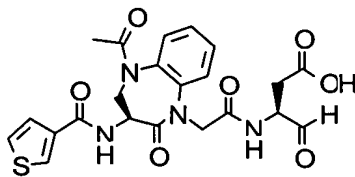


Application No. 10/058,522
Supp. Amdt. dated March 4, 2004

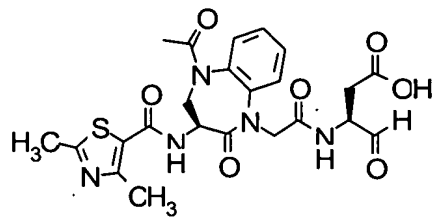
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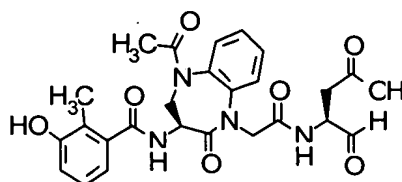
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*i*

625

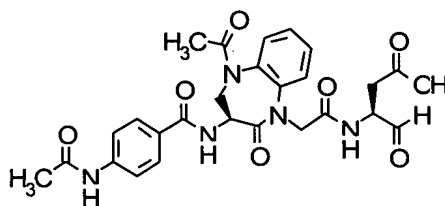
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626



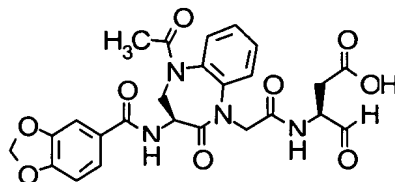
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627



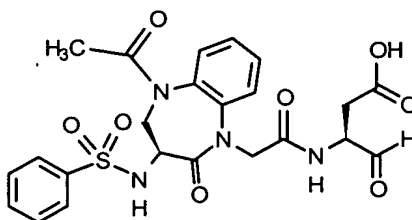
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628



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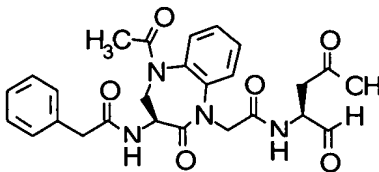
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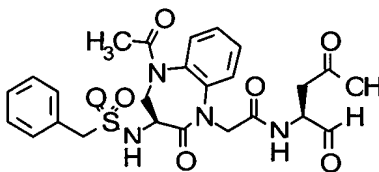
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Application No. 10/058,522
Supp. Amdt. dated March 4, 2004

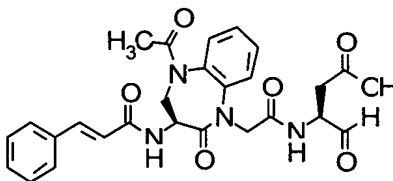
630



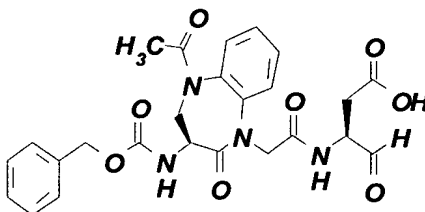
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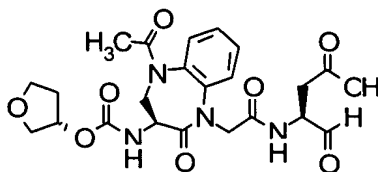
632



633

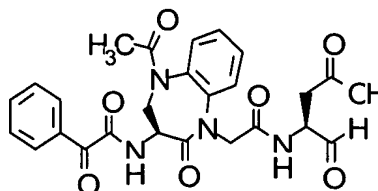


634



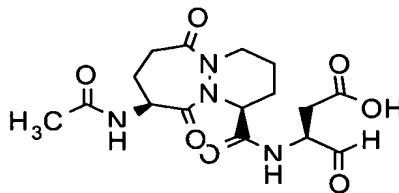
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635



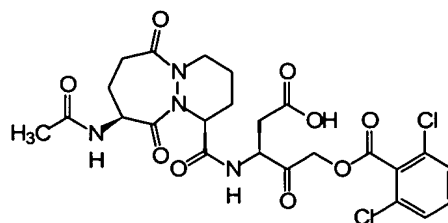
40. (previously presented) The compound
according to claims 62 or 68, selected from the group
5 consisting of:

214c



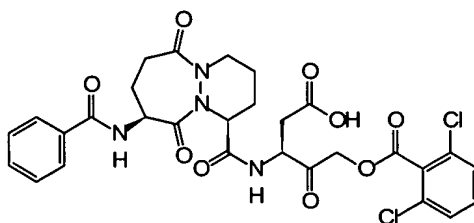
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217c



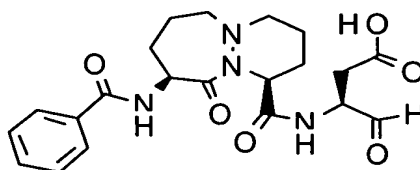
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217e



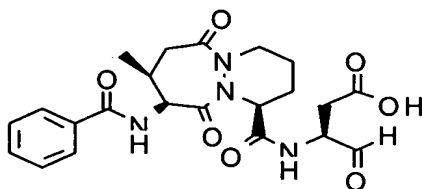
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246



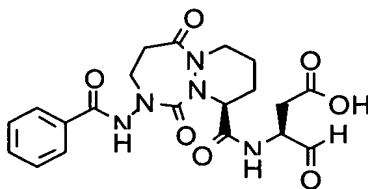
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257



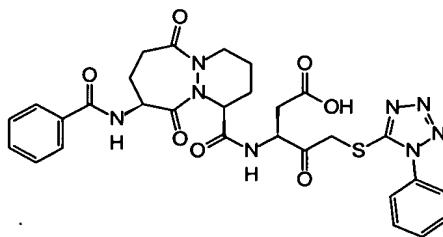
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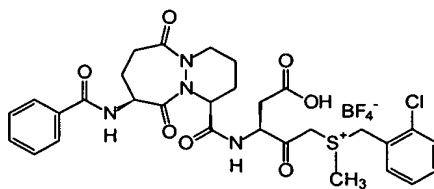
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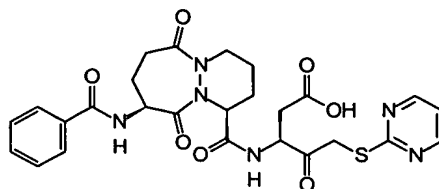
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281



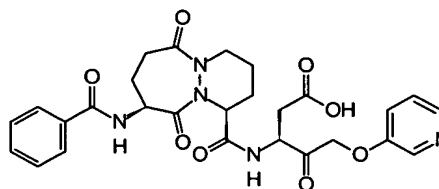
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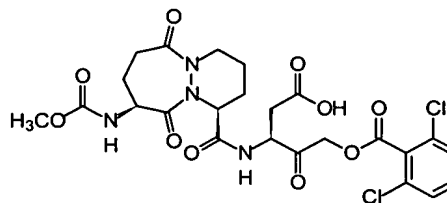
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283



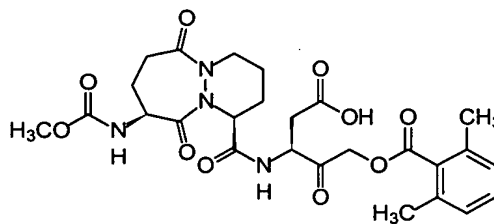
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284



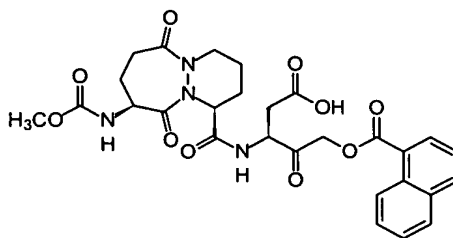
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285



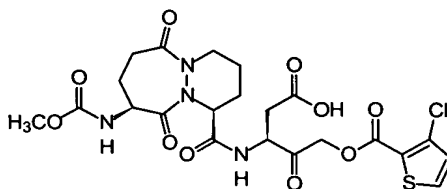
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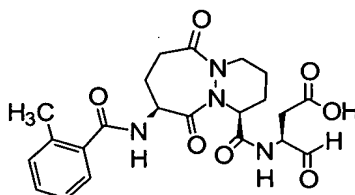
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287



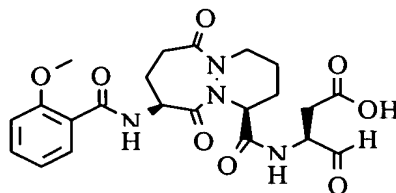
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404



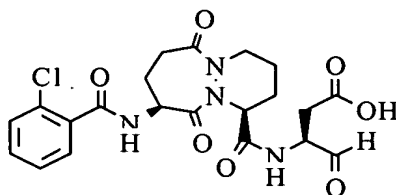
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405



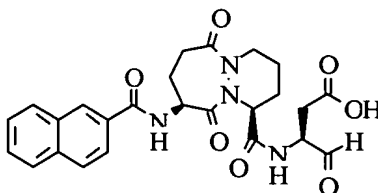
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406



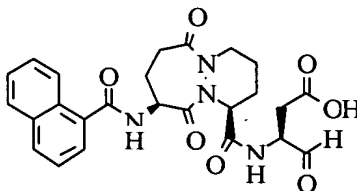
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407



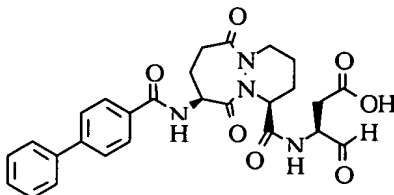
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408



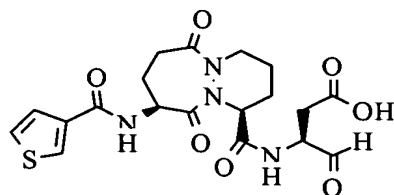
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409



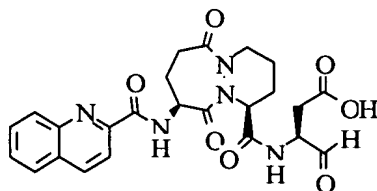
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410



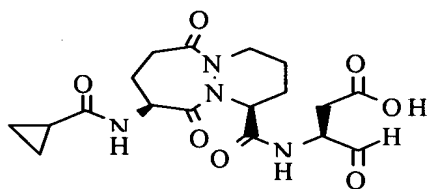
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411



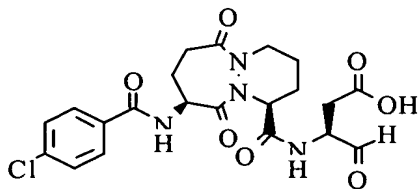
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413



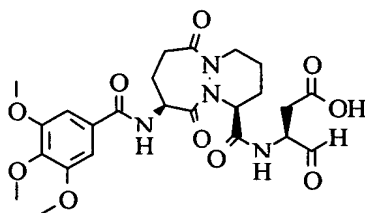
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416



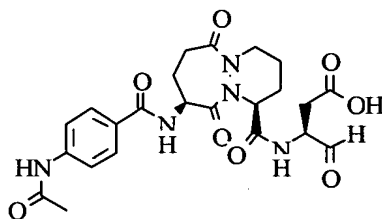
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417



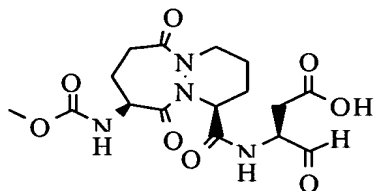
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418



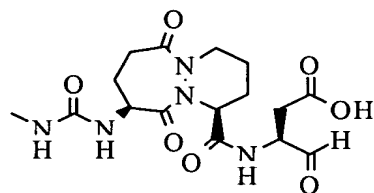
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419



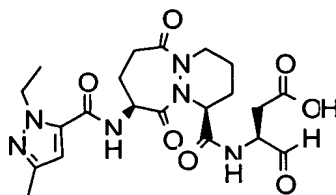
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420



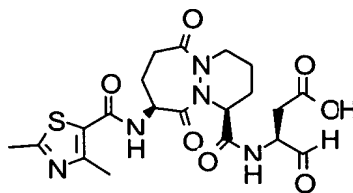
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422



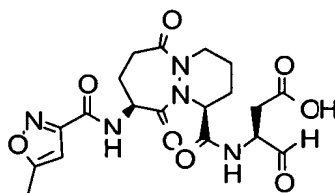
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423



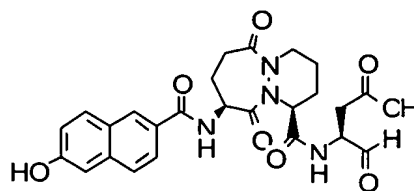
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424



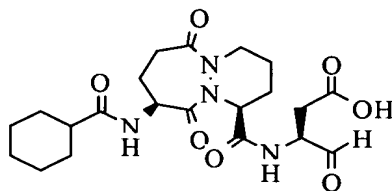
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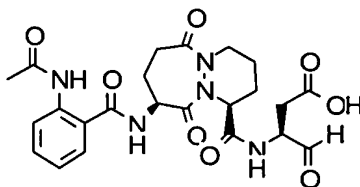
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426



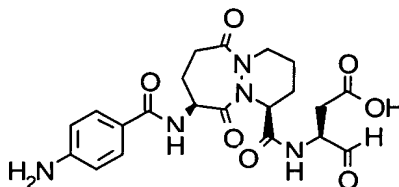
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430



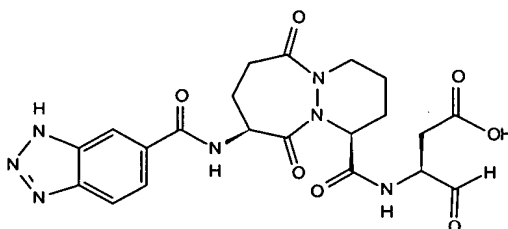
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431



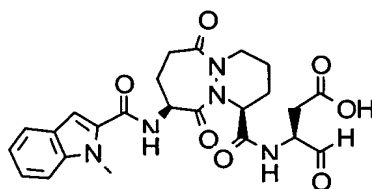
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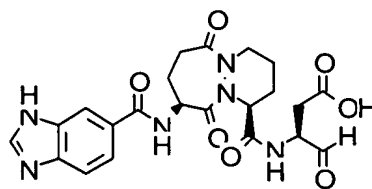
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433



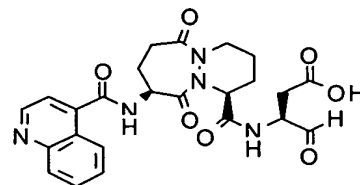
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434



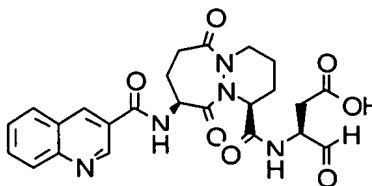
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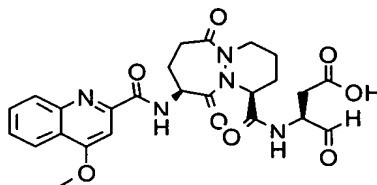
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436



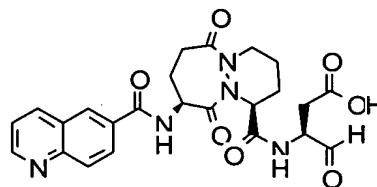
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437



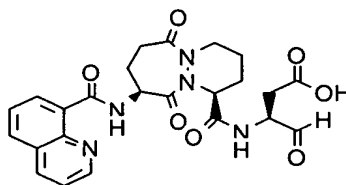
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438



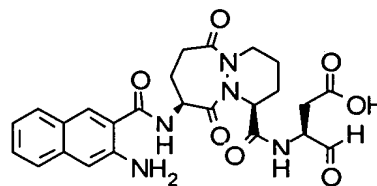
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439



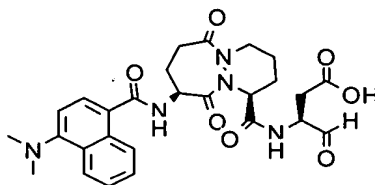
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440



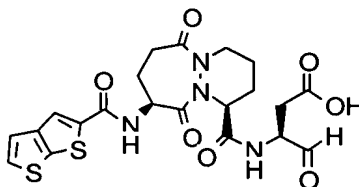
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441



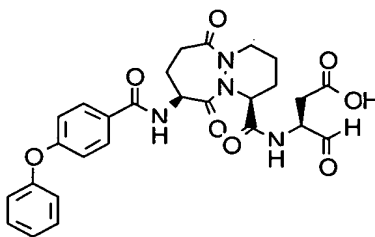
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442



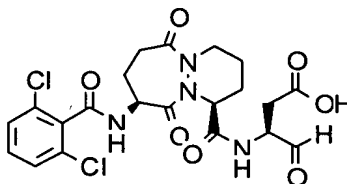
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443



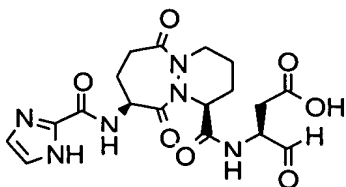
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444



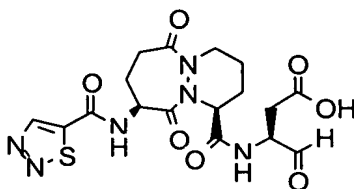
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445



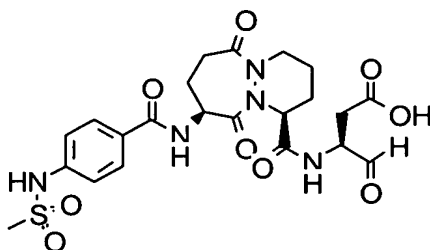
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446

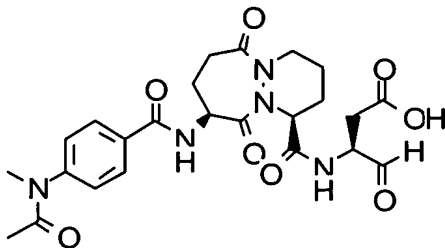


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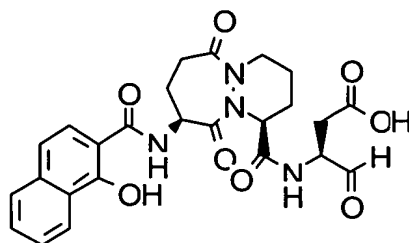
447



448

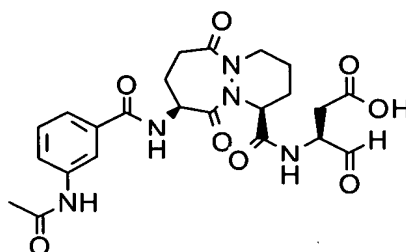


449



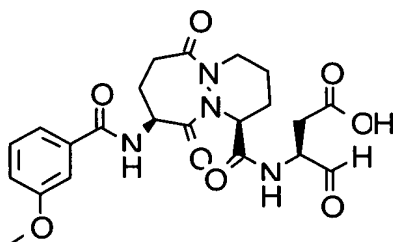
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450



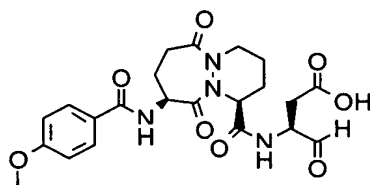
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451



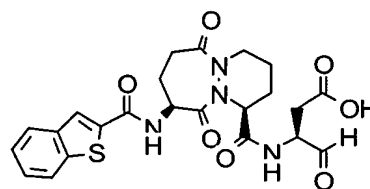
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452



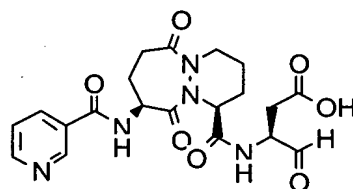
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453



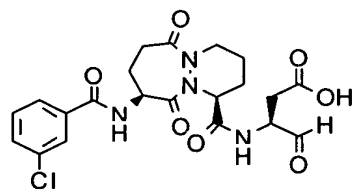
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454



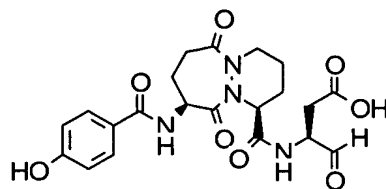
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455



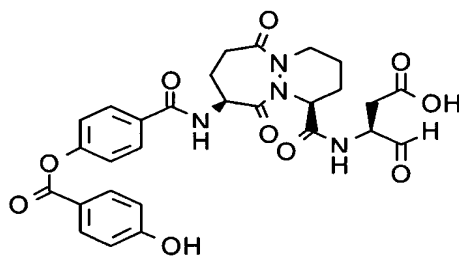
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456



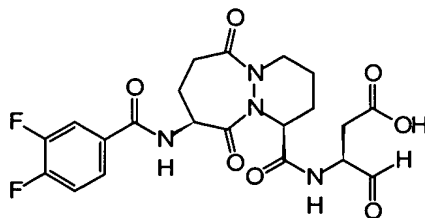
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457



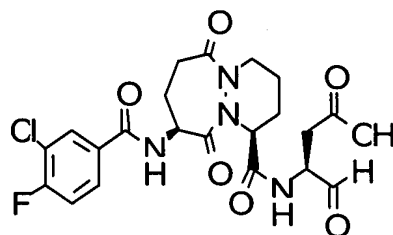
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458



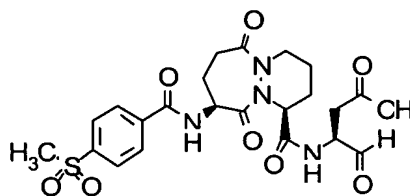
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459



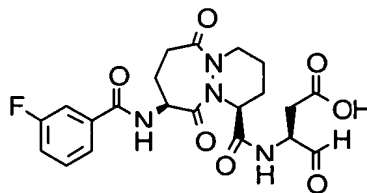
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460



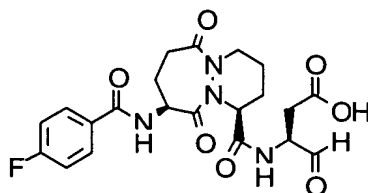
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462



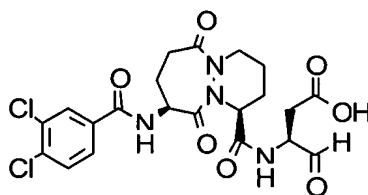
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463



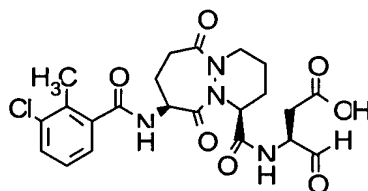
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464



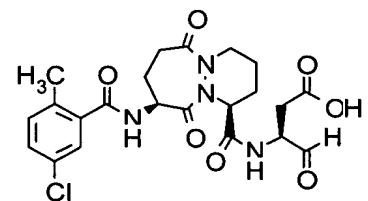
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465



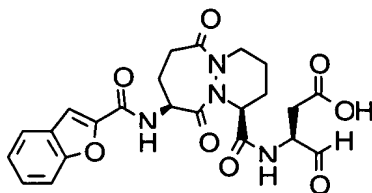
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466



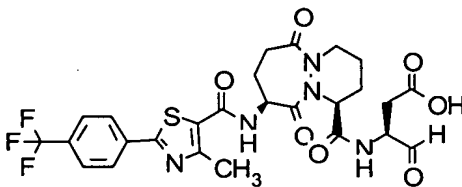
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467



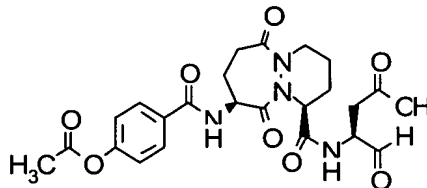
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468



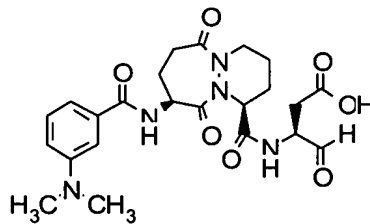
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469



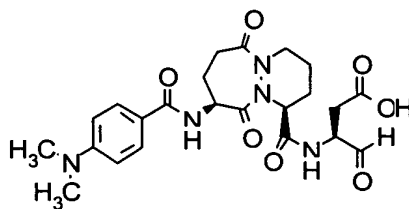
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470



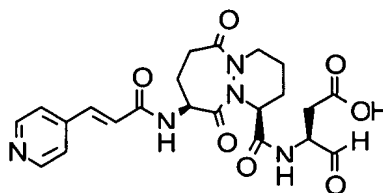
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471



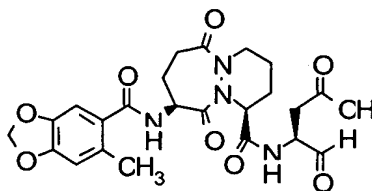
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472



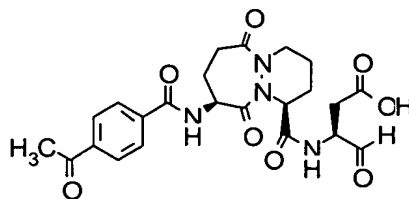
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473



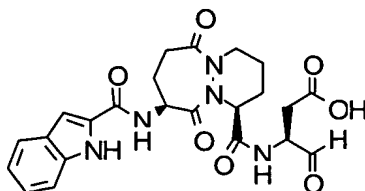
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474



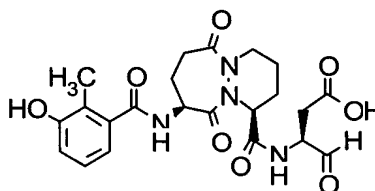
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475



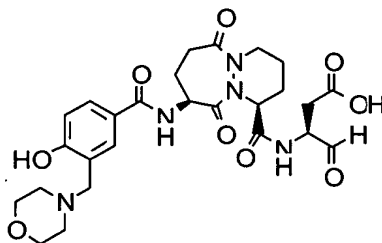
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476



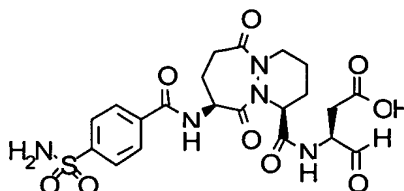
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477



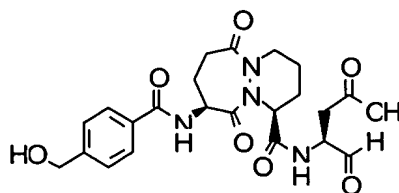
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478



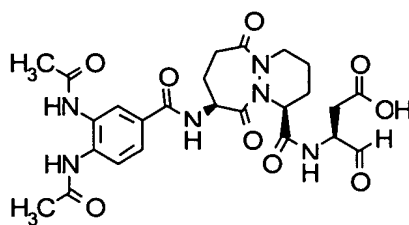
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479



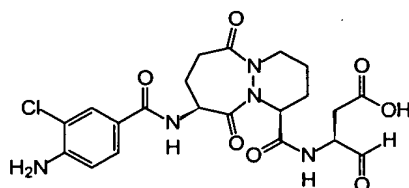
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480



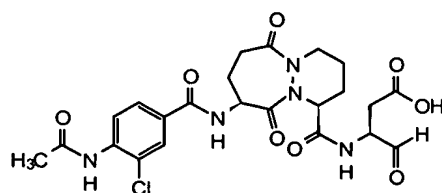
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481



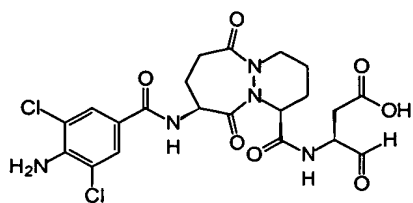
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481s



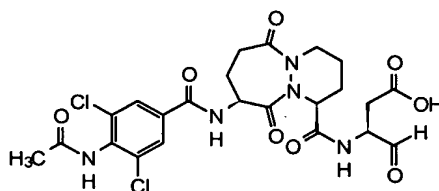
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482



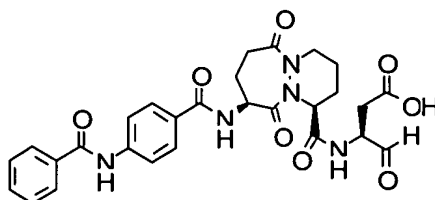
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482s



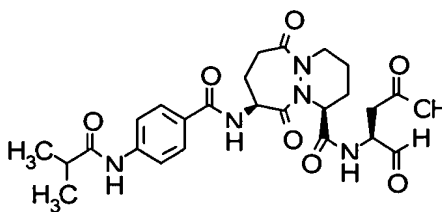
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483



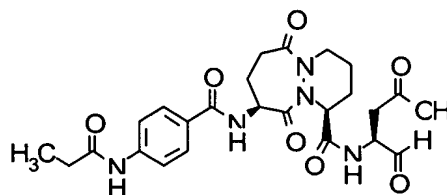
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484



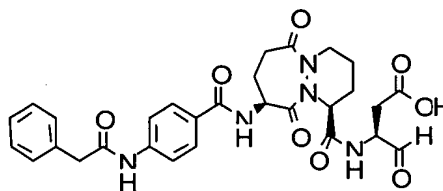
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485



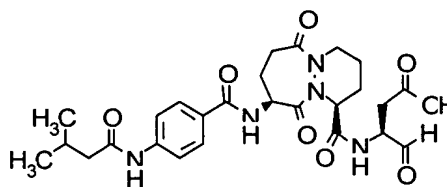
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486



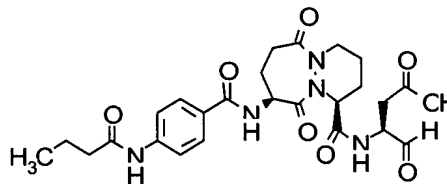
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487



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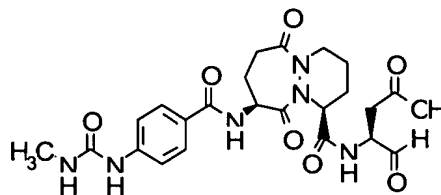
488



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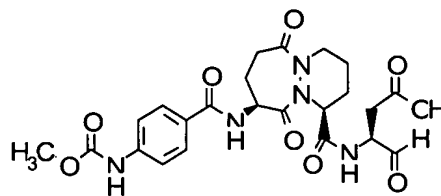
Application No. 10/058,522
Supp. Amdt. dated March 4, 2004

489

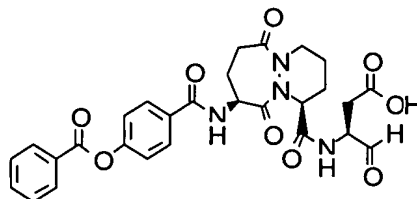


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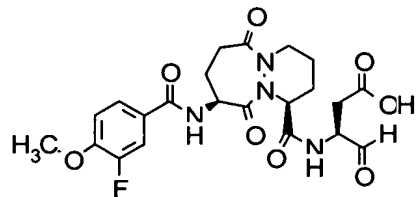
490



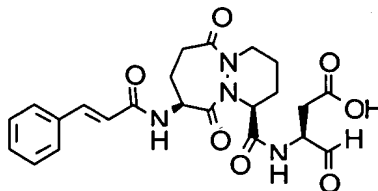
491



493

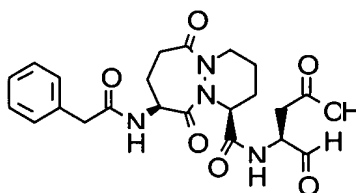


494



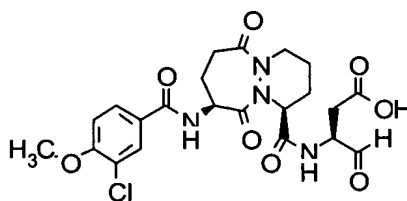
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495



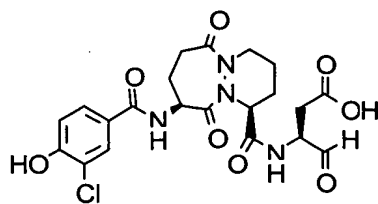
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497



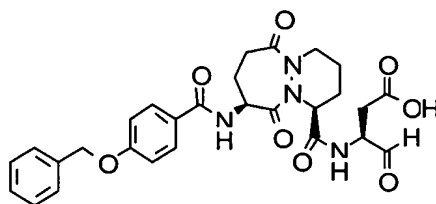
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498



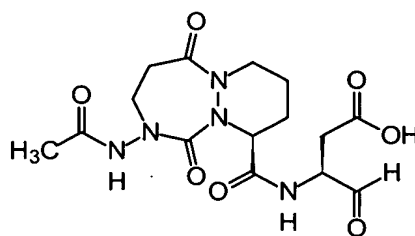
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499



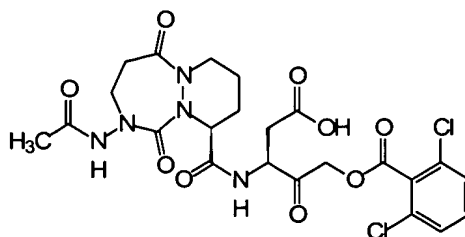
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814c



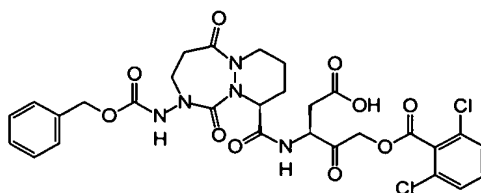
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817c



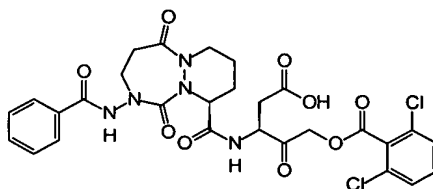
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817d



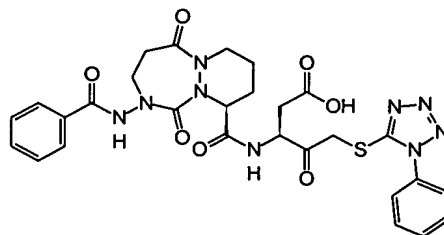
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817e



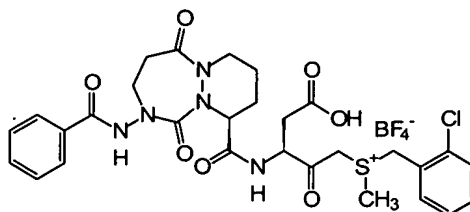
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880



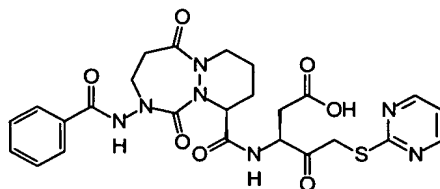
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881



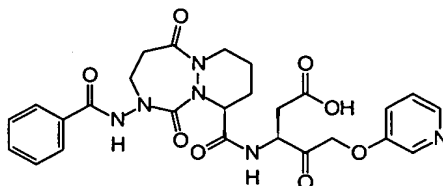
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882



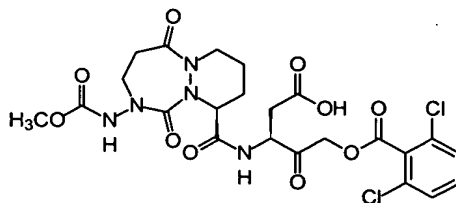
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883



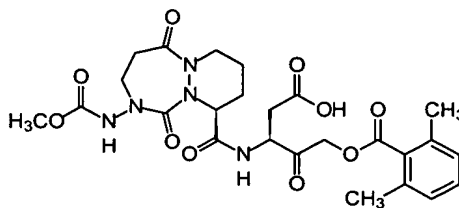
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884



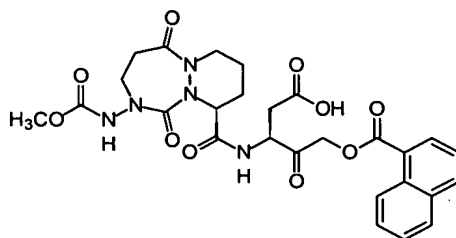
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885



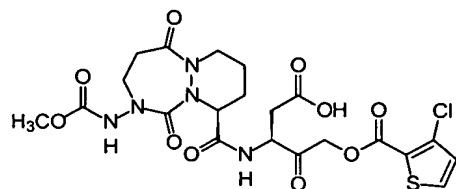
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886



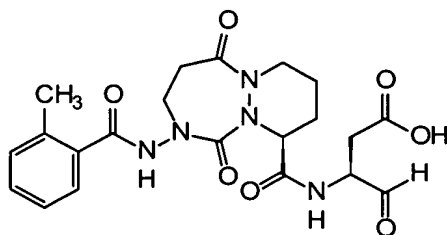
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887



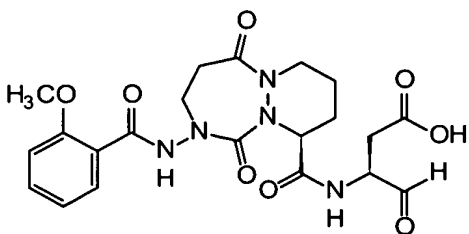
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1004



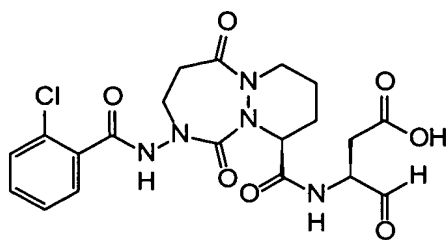
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1005



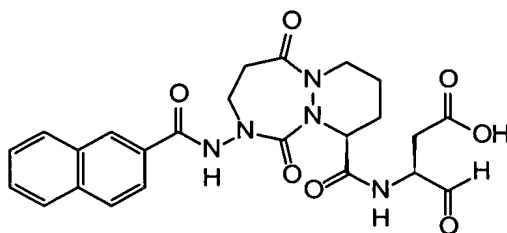
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1006



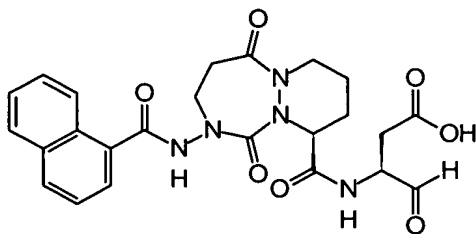
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1007



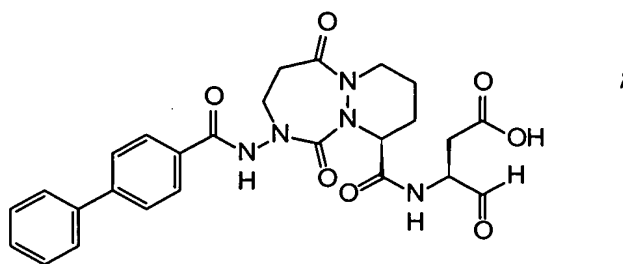
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1008

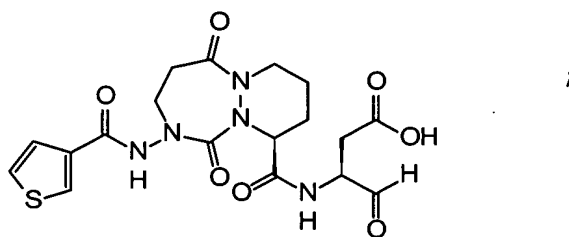


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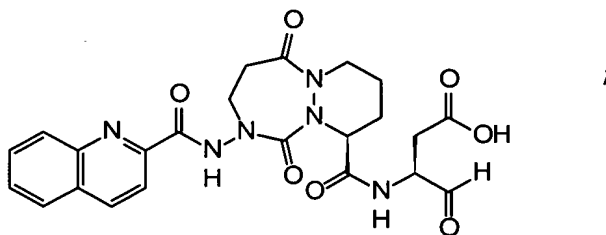
1009



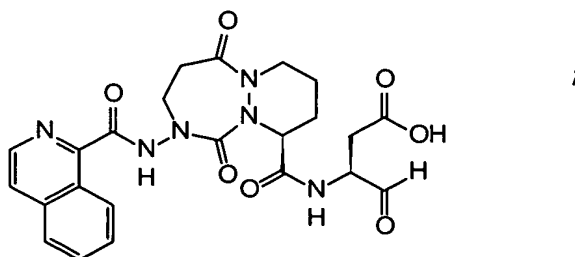
1010



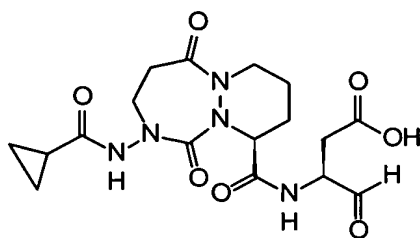
1011



1012

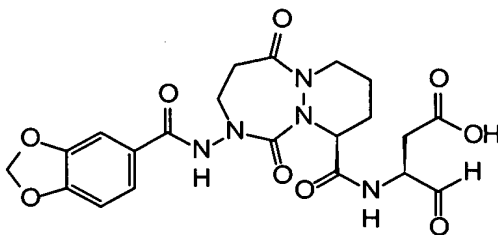


1013



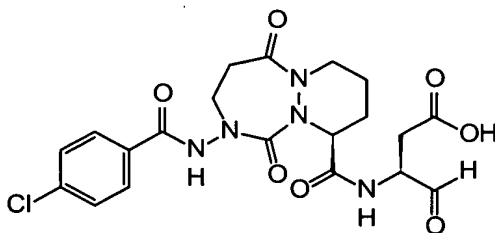
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1015



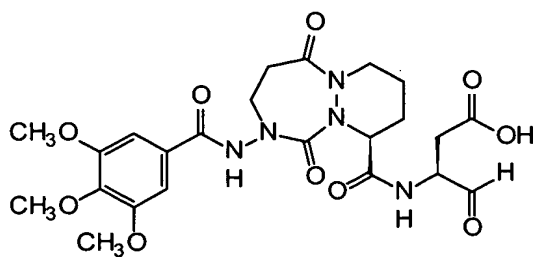
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1016



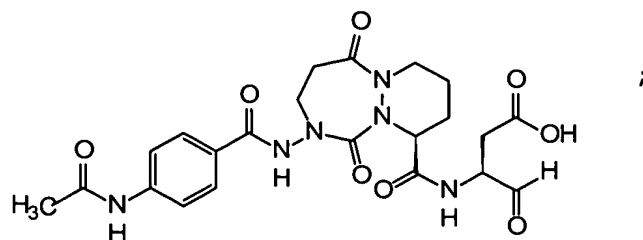
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1017

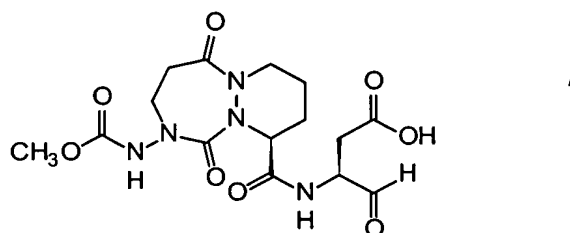


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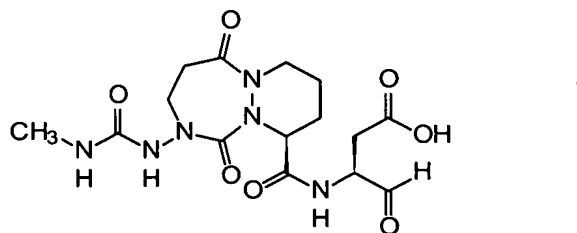
1018



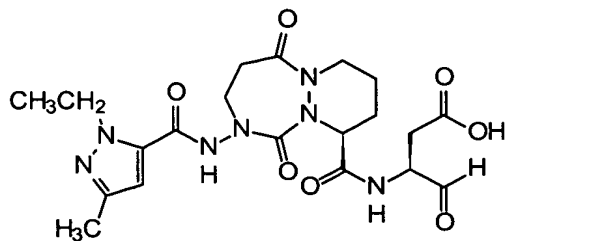
1019



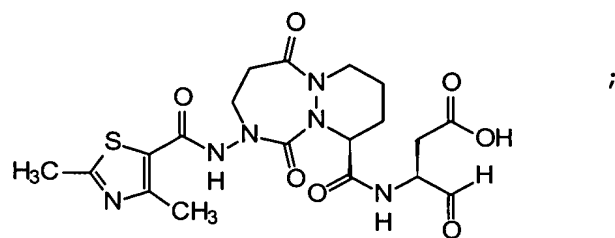
1020



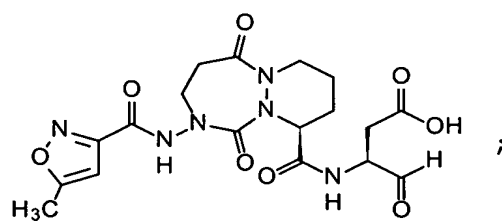
1022



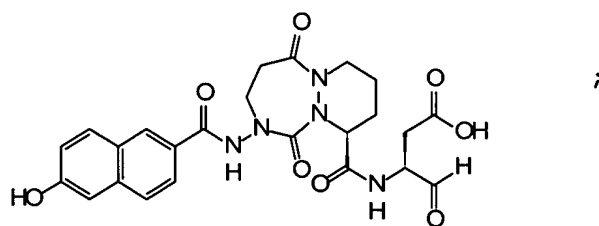
1023



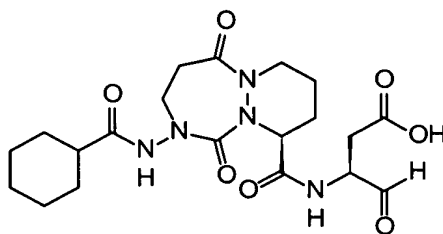
1024



1025

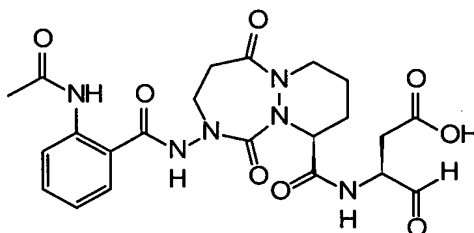


1026



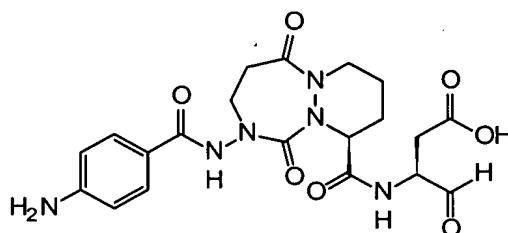
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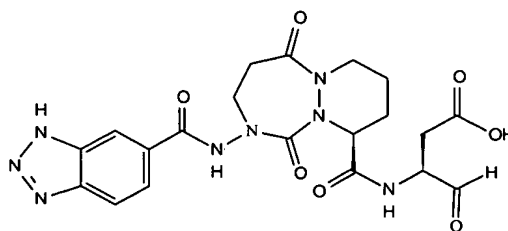
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1031



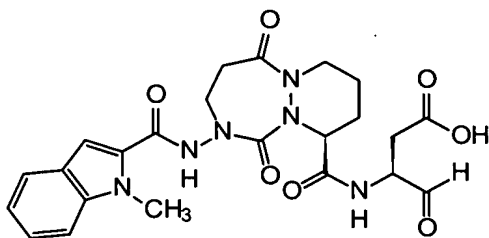
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1032



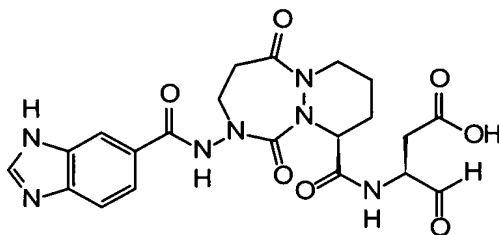
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1033



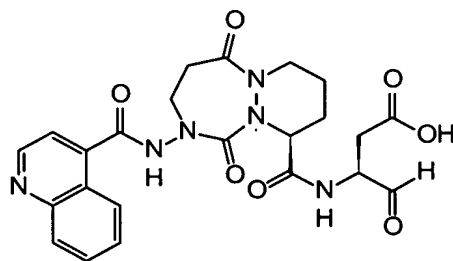
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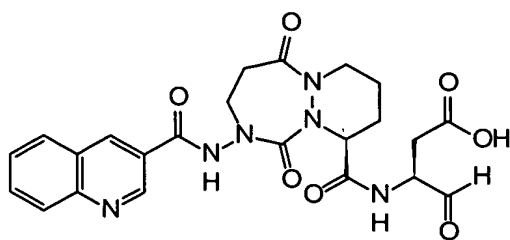
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1035



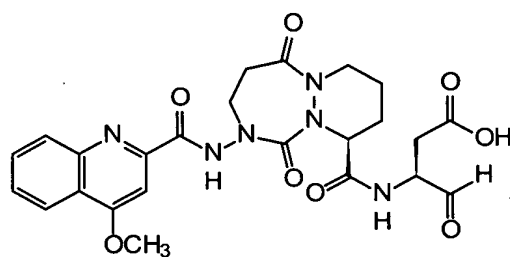
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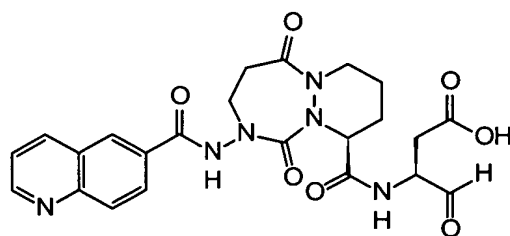
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1037



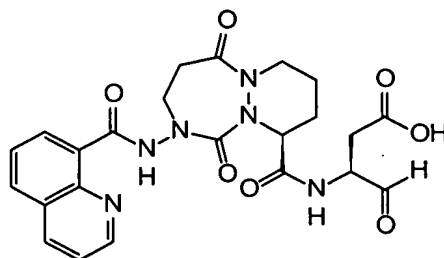
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1038



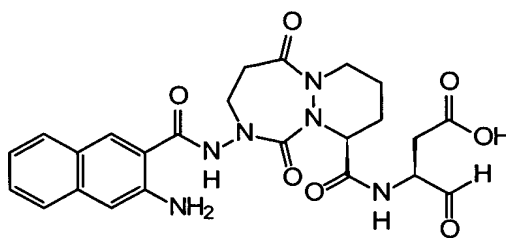
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1039



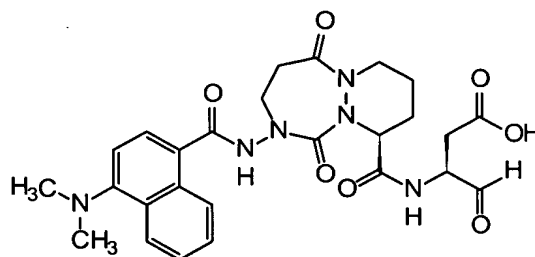
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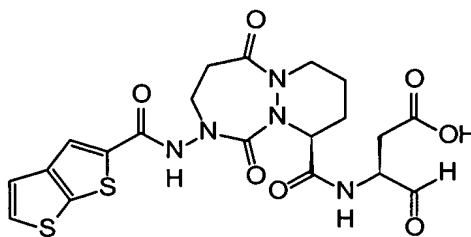
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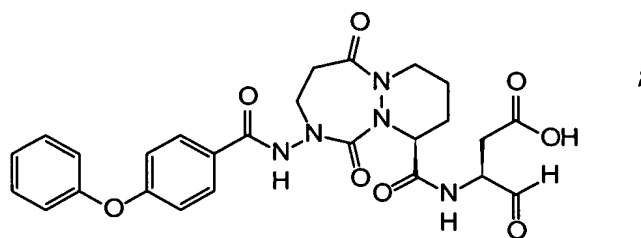
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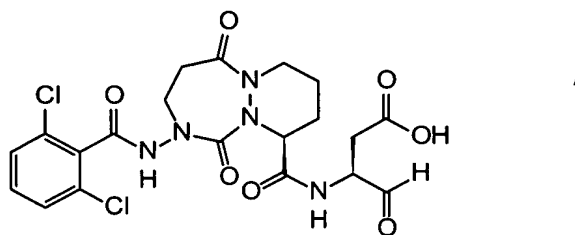


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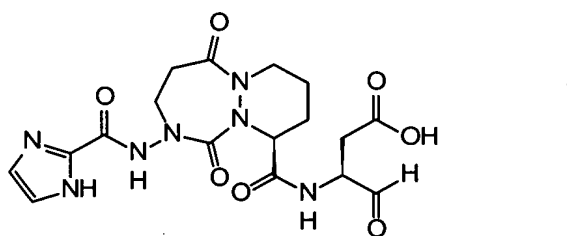
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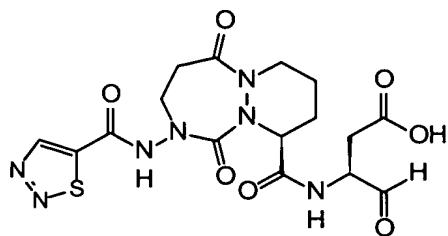
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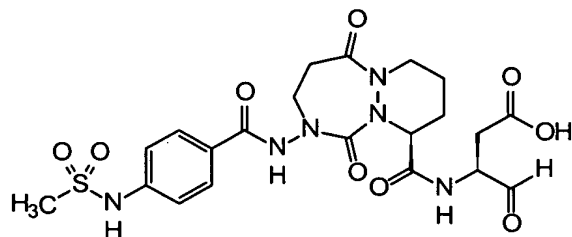
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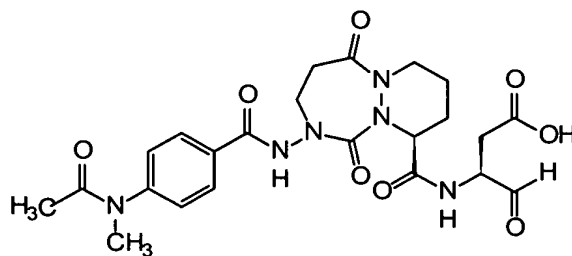
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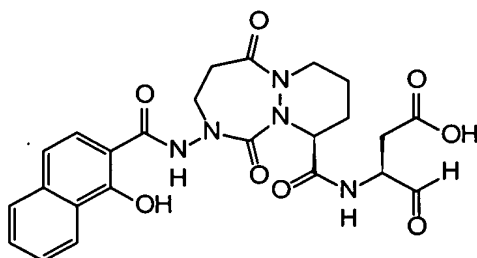
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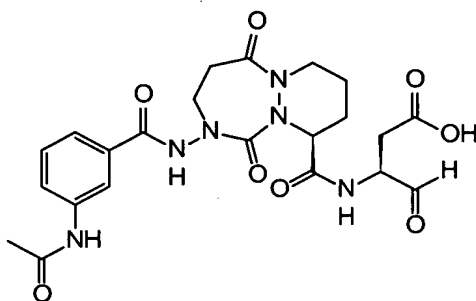
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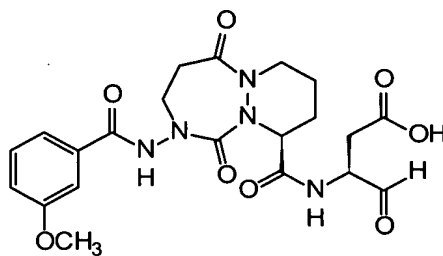


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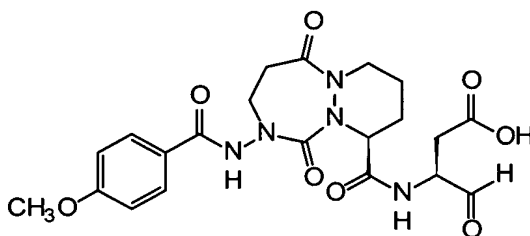
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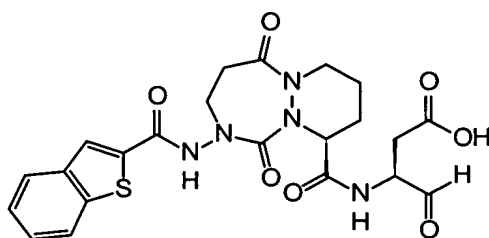
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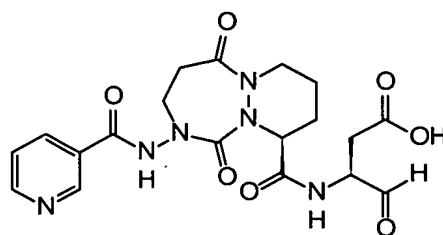
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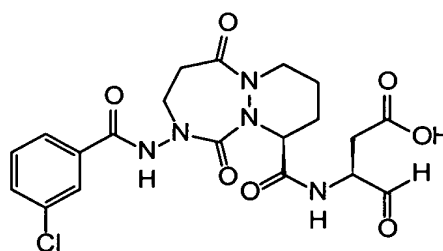
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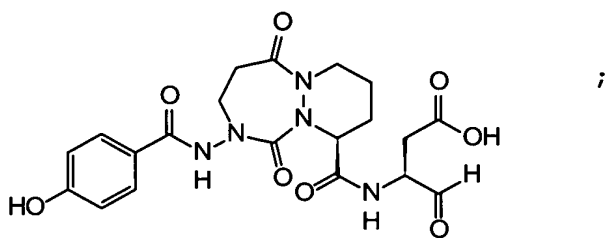
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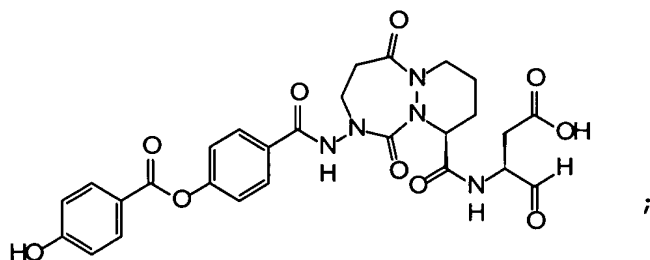


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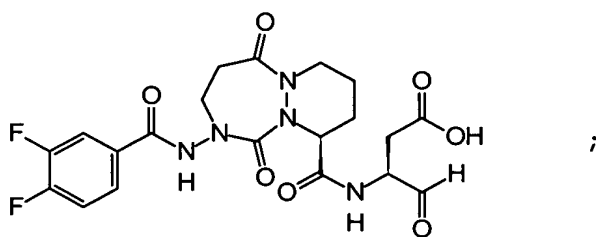
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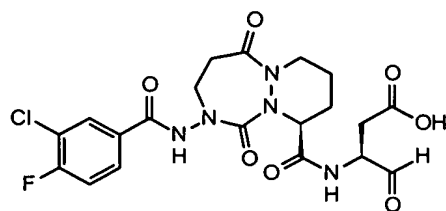
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1058

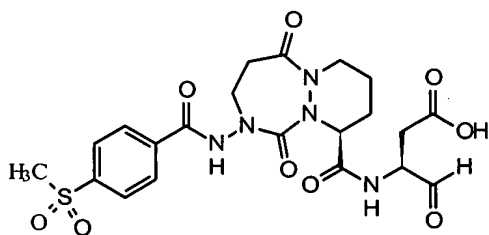


1059



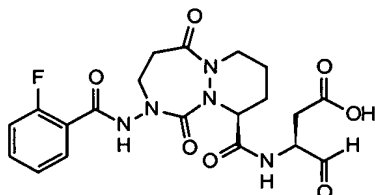
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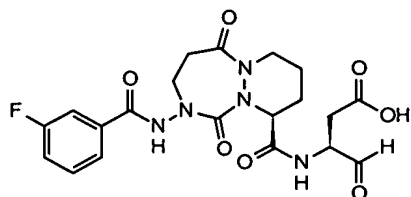
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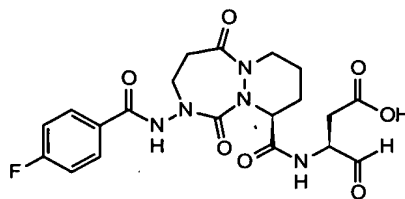
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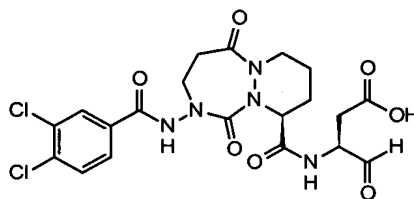
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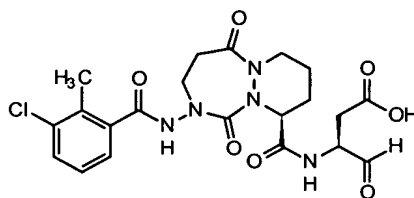
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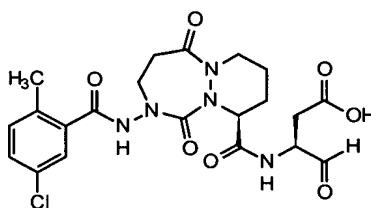
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1065



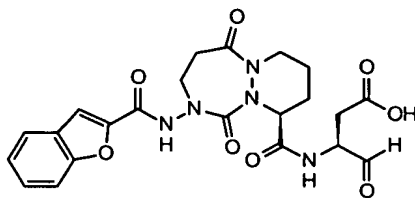
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1066



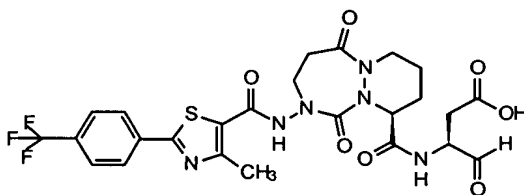
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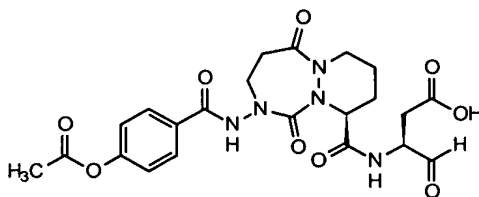
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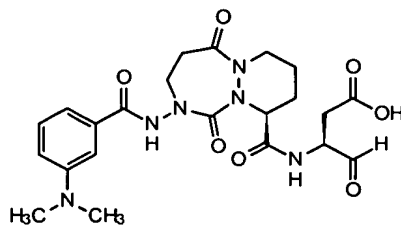
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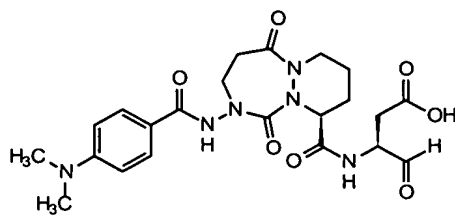
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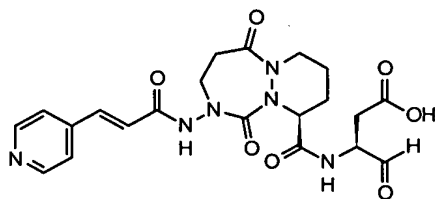
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1071



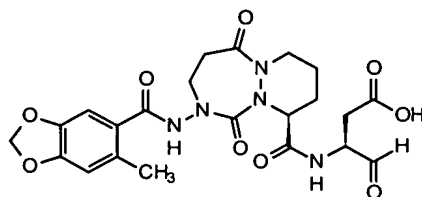
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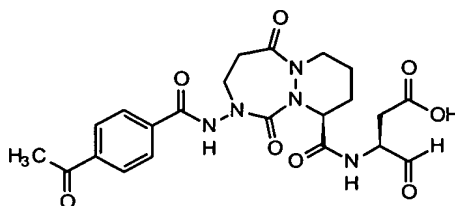
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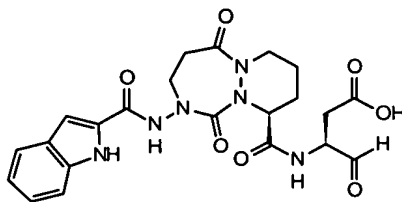
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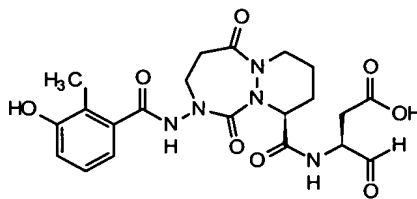
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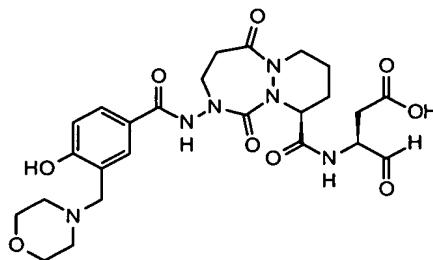
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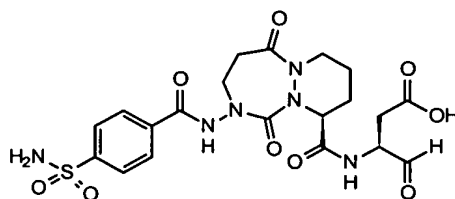
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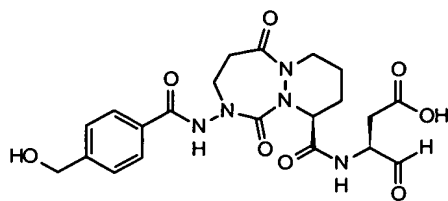
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1078

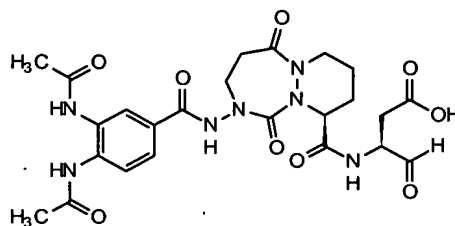


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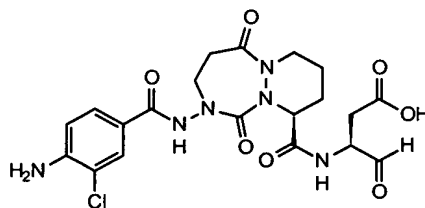
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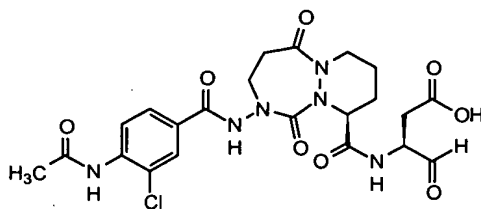
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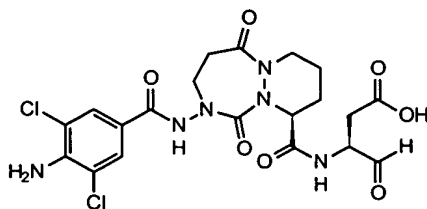
1081



1081s

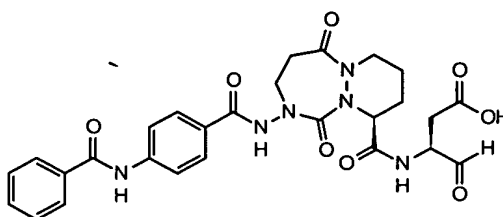


1082



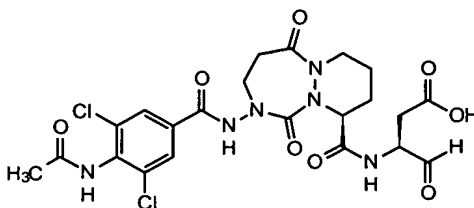
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1083



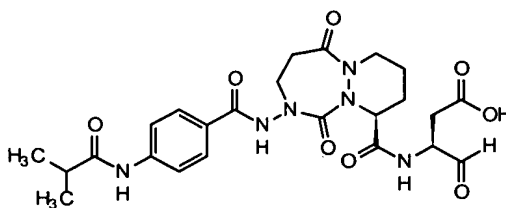
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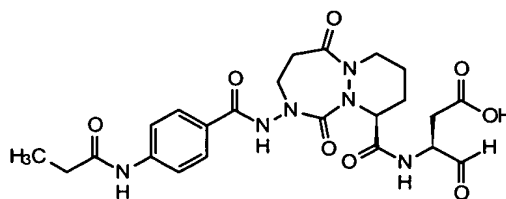
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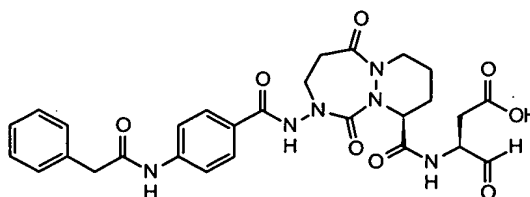
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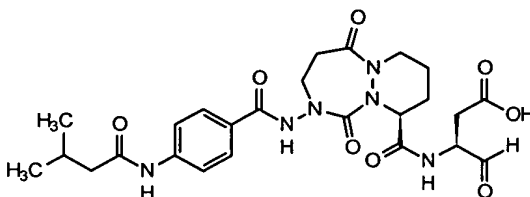
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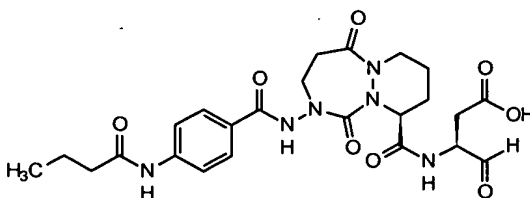
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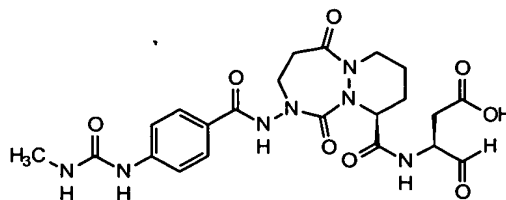
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1088



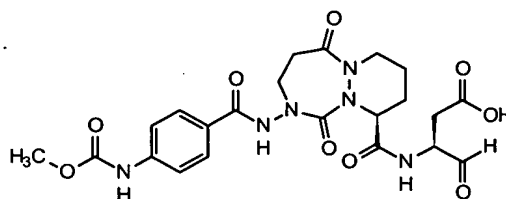
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1089



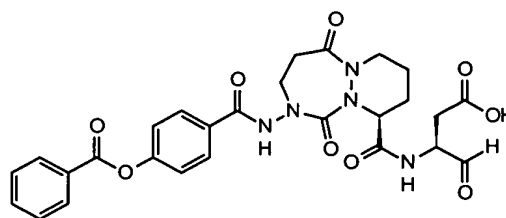
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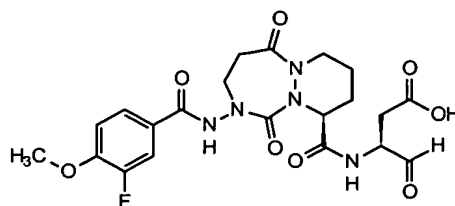
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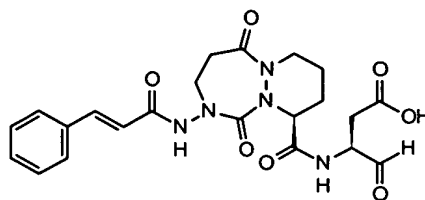
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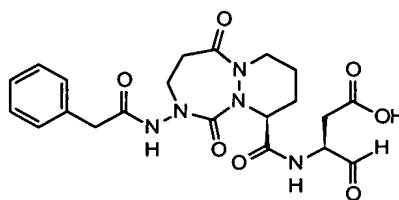
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1094



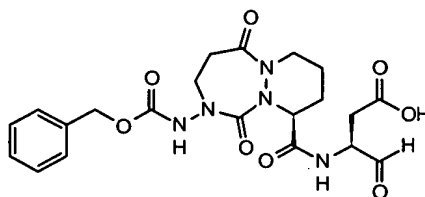
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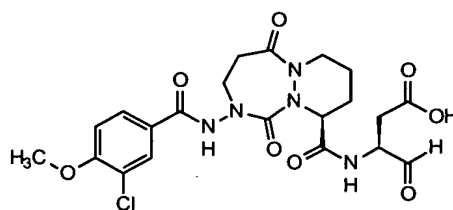
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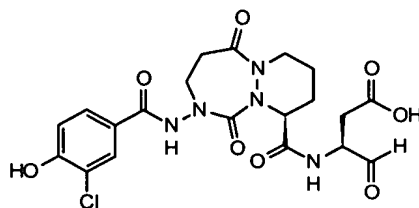
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1097



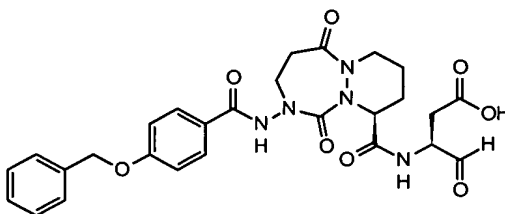
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1098



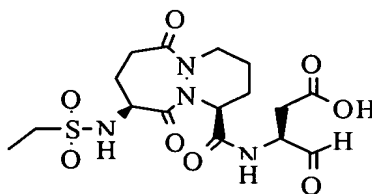
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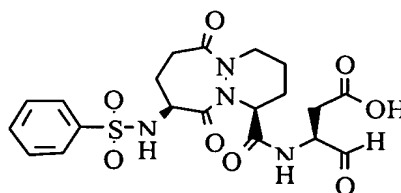
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421



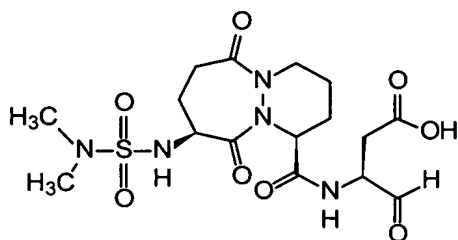
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427



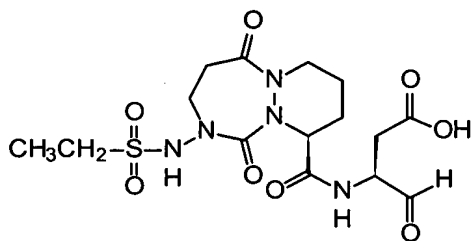
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428



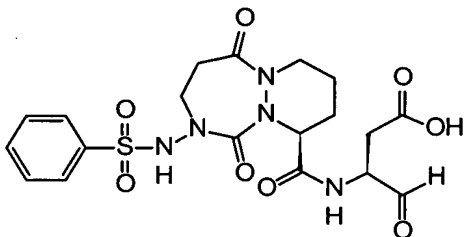
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1021



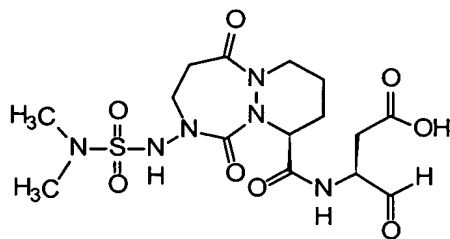
;

1027



; and

1028



.

41. (canceled)

42. (previously presented) A pharmaceutical composition comprising a compound according to any one

of claims 38-40, 57, 62, 66, 68, 79-83, 88-93, 95, 96, 98, 99, 100, 102, 104, 112, 114, 118-131, 133-135 and a pharmaceutically acceptable carrier.

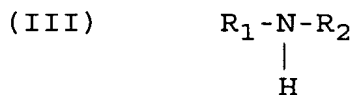
41-54. (canceled)

5 55. (previously presented) A method for
treating or preventing a disease selected from the
group consisting of an IL-1 mediated disease, an
apoptosis mediated disease, an inflammatory disease, an
autoimmune disease, a destructive bone disorder, a
10 proliferative disorder, an infectious disease, a
degenerative disease, a necrotic disease,
osteoarthritis, pancreatitis, asthma, adult respiratory
distress syndrome, glomerulonephritis, rheumatoid
arthritis, systemic lupus erythematosus, scleroderma,
15 chronic thyroiditis, Grave's disease, autoimmune
gastritis, insulin-dependent diabetes mellitus (Type
I), autoimmune hemolytic anemia, autoimmune
neutropenia, thrombocytopenia, chronic active
hepatitis, myasthenia gravis, inflammatory bowel
20 disease, Crohn's disease, psoriasis, graft vs host
disease, osteoporosis, multiple myeloma-related bone
disorder, acute myelogenous leukemia, chronic
myelogenous leukemia, metastatic melanoma, Kaposi's

sarcoma, multiple myeloma, sepsis, septic shock,
Shigellosis, Alzheimer's disease, Parkinson's disease,
cerebral ischemia, myocardial ischemia, spinal muscular
atrophy, multiple sclerosis, AIDS-related encephalitis,
5 HIV-related encephalitis, aging, alopecia, and
neurological damage due to stroke in a patient
comprising the step of administering to said patient a
pharmaceutical composition according to claim 42.

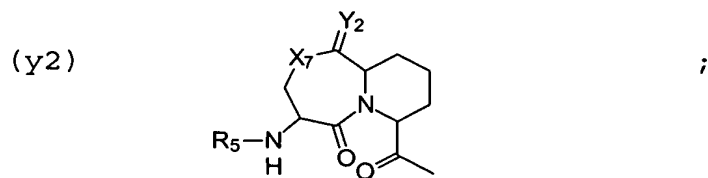
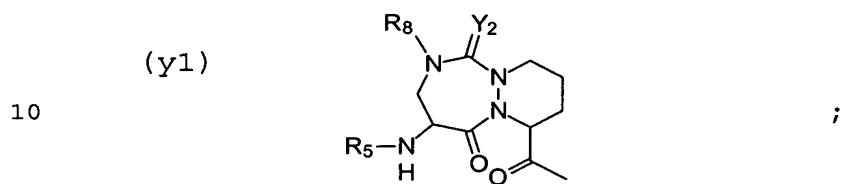
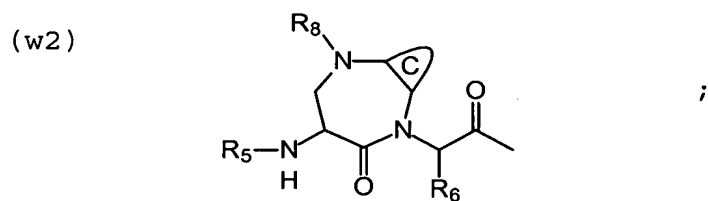
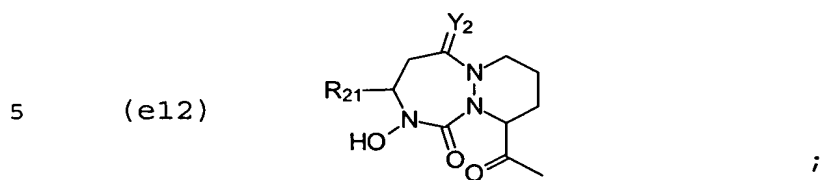
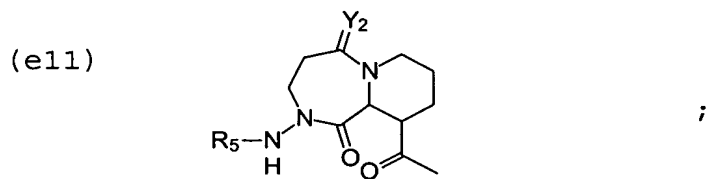
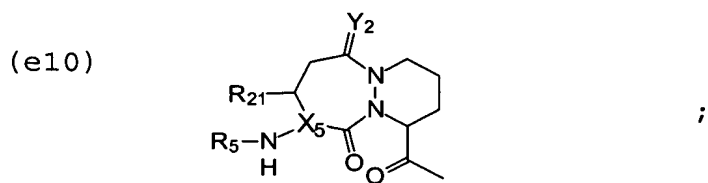
56. (previously presented) The method
10 according to claim 55, wherein the disease is selected
from the group consisting of osteoarthritis, acute
pancreatitis, rheumatoid arthritis, inflammatory bowel
disease, Crohn's disease, psoriasis, and Alzheimer's
disease.

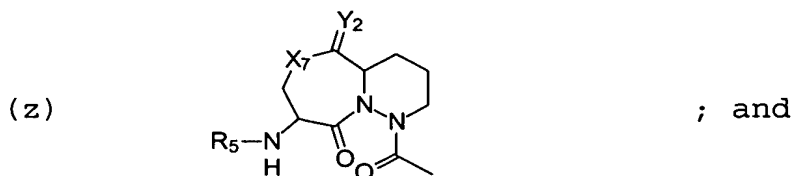
15 57. (previously presented) A compound
represented by the formula:



20 wherein:

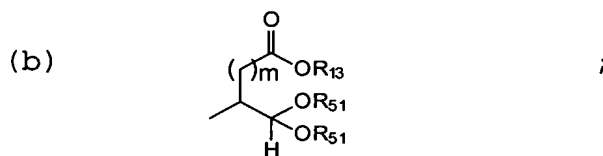
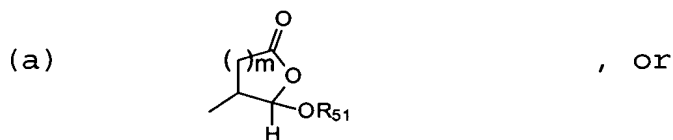
R₁ is selected from the group consisting of the
following formulae:





ring C is chosen from the group consisting of
 benzo, pyrido, thieno, pyrrolo, furano, thiazolo,
 5 isothiazolo, oxazolo, isoxazolo, pyrimido, imidazolo,
 cyclopentyl, and cyclohexyl;

R₂ is:



10 m is 1 or 2;

each R₅ is independently selected from the group
 consisting of:

- 15
- C(O)-R₁₀,
 - C(O)O-R₉,
 - C(O)-N(R₁₀)(R₁₀)
 - S(O)₂-R₉,
 - S(O)₂-NH-R₁₀,
 - C(O)-CH₂-O-R₉,

-C(O)C(O)-R₁₀,
-R₉,
-H,
-C(O)C(O)-OR₁₀, and
5 -C(O)C(O)-N(R₉)(R₁₀);

X₅ is CH or N;

Y₂ is H₂ or O;

10 X₇ is -N(R₈)- or -O-;

R₆ is selected from the group consisting of -H and
-CH₃;

R₈ is selected from the group consisting of:

15 -C(O)-R₁₀,
-C(O)O-R₉,
-C(O)-N(H)-R₁₀,
-S(O)₂-R₉,
-S(O)₂-NH-R₁₀,
20 -C(O)-CH₂-OR₁₀,
-C(O)C(O)-R₁₀;
-C(O)-CH₂N(R₁₀)(R₁₀),
-C(O)-CH₂C(O)-O-R₉,
-C(O)-CH₂C(O)-R₉,
25 -H, and
-C(O)-C(O)-OR₁₀;

each R₉ is independently selected from the group
consisting of -Ar₃ and a -C₁₋₆ straight or branched
alkyl group optionally substituted with -Ar₃, wherein
30 the -C₁₋₆ alkyl group is optionally unsaturated;

each R_{10} is independently selected from the group consisting of -H, - Ar_3 , a - C_{3-6} cycloalkyl group, and a - C_{1-6} straight or branched alkyl group optionally substituted with - Ar_3 , wherein the - C_{1-6} alkyl group is
5 optionally unsaturated;

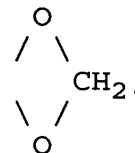
R_{13} is selected from the group consisting of H, Ar_3 , and a - C_{1-6} straight or branched alkyl group optionally substituted with - Ar_3 , -CONH₂, -OR₅, -OH, -OR₉, or -CO₂H;

10 each R_{51} is independently selected from the group consisting of R_9 , -C(O)- R_9 , -C(O)-N(H)- R_9 , or each R_{51} taken together forms a saturated 4-8 member carbocyclic ring or heterocyclic ring containing -O-, -S-, or -NH-;

each R_{21} is independently selected from the group
15 consisting of -H or a - C_{1-6} straight or branched alkyl group;

each Ar_3 is a cyclic group independently selected from the set consisting of an aryl group which contains 6, 10, 12, or 14 carbon atoms and between 1 and 3 rings
20 and an aromatic heterocycle group containing between 5 and 15 ring atoms and between 1 and 3 rings, said heterocyclic group containing at least one heteroatom group selected from -O-, -S-, -SO-, SO₂, =N-, and -NH-,
said heterocycle group optionally containing one or
25 more double bonds, said heterocycle group optionally comprising one or more aromatic rings, and said cyclic group optionally being singly or multiply substituted by - Q_1 ;

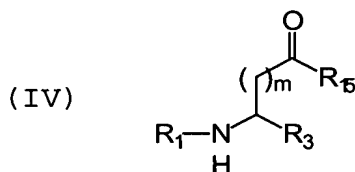
each Q_1 is independently selected from the group consisting of $-NH_2$, $-CO_2H$, $-Cl$, $-F$, $-Br$, $-I$, $-NO_2$, $-CN$, $=O$, $-OH$, $-perfluoro\ C_{1-3}\ alkyl$, R_5 , $-OR_5$, $-NHR_5$, $-OR_9$, $-N(R_9)(R_{10})$, $-R_9$, $-C(O)-R_{10}$, and



10 provided that when $-Ar_3$ is substituted with a Q_1 group which comprises one or more additional $-Ar_3$ groups, said additional $-Ar_3$ groups are not substituted with another $-Ar_3$.

58-61. (canceled)

15 62. (previously presented) A compound represented by the formula:

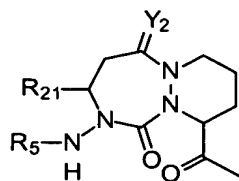


wherein:

m is 1 or 2;

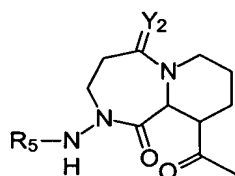
20 R_1 is selected from the group consisting of the following formulae:

(e10-A)



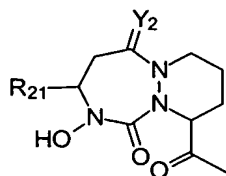
;

(e11)



;

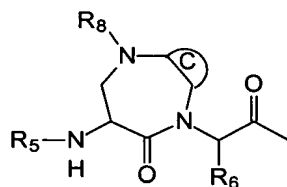
(e12)



;

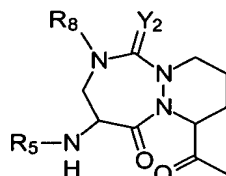
5

(w2)



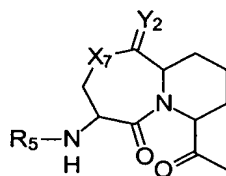
;

(y1)



;

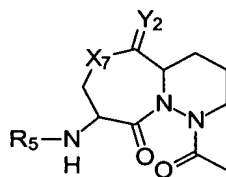
(y2)



; and

10

(z)



;

ring C is chosen from the group consisting of
 15 benzo, pyrido, thieno, pyrrolo, furano, thiazolo,

isothiazolo, oxazolo, isoxazolo, pyrimido, imidazolo,
cyclopentyl, and cyclohexyl;

R_3 is selected from the group consisting of:

- CN,
- 5 -C(O)-H,
- C(O)-CH₂-T₁-R₁₁,
- C(O)-CH₂-F,
- C=N-O-R₉, and
- CO-Ar₂;

10 each R_5 is independently selected from the group
consisting of:

- C(O)-R₁₀,
- C(O)O-R₉,
- C(O)-N(R₁₀)(R₁₀)
- 15 -S(O)₂-R₉,
- S(O)₂-NH-R₁₀,
- C(O)-CH₂-O-R₉,
- C(O)C(O)-R₁₀,
- R₉,
- 20 -H,
- C(O)C(O)-OR₁₀, and
- C(O)C(O)-N(R₉)(R₁₀);

Y_2 is H₂ or O;

25 X_7 is -N(R₈)- or -O-;

each T₁ is independently selected from the group
consisting of. -O-, -S-, -S(O)-, and -S(O)₂-;

R_6 is selected from the group consisting of -H and

-CH₃;

R₈ is selected from the group consisting of:

- C(O)-R₁₀,
- C(O)O-R₉,
- 5 -C(O)-NH-R₁₀,
- S(O)₂-R₉,
- S(O)₂-NH-R₁₀,
- C(O)-CH₂-OR₁₀,
- C(O)C(O)-R₁₀,
- 10 -C(O)-CH₂-N(R₁₀)(R₁₀),
- C(O)-CH₂C(O)-O-R₉,
- C(O)-CH₂C(O)-R₉,
- H, and
- C(O)-C(O)-OR₁₀;

15 each R₉ is independently selected from the group consisting of -Ar₃ and a -C₁₋₆ straight or branched alkyl group optionally substituted with -Ar₃, wherein the -C₁₋₆ alkyl group is optionally unsaturated;

20 each R₁₀ is independently selected from the group consisting of -H, -Ar₃, a -C₃₋₆ cycloalkyl group, and a -C₁₋₆ straight or branched alkyl group optionally substituted with -Ar₃, wherein the -C₁₋₆ alkyl group is optionally unsaturated;

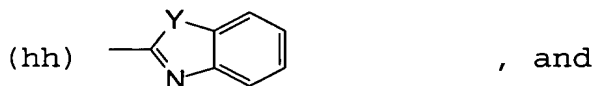
25 each R₁₁ is independently selected from the group consisting of:

- Ar₄,
- (CH₂)₁₋₃-Ar₄,
- H, and
- C(O)-Ar₄;

R_{15} is selected from the group consisting of -OH, -OAr₃, -N(H)-OH, and -OC₁₋₆, wherein C₁₋₆ is a straight or branched alkyl group optionally substituted with -Ar₃, -CONH₂, -OR₅, -OH, -OR₉, or -CO₂H;

5 each R_{21} is independently selected from the group consisting of -H or a -C₁₋₆ straight or branched alkyl group;

Ar₂ is independently selected from the following group, in which any ring may optionally be singly or
10 multiply substituted by -Q₁ or phenyl, optionally substituted by Q₁:



15 wherein each Y is independently selected from the group consisting of O and S;

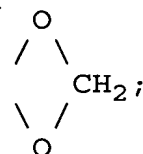
each Ar₃ is a cyclic group independently selected from the set consisting of an aryl group which contains 6, 10, 12, or 14 carbon atoms and between 1 and 3 rings
20 and an aromatic heterocycle group containing between 5 and 15 ring atoms and between 1 and 3 rings, said heterocyclic group containing at least one heteroatom group selected from -O-, -S-, -SO-, SO₂, =N-, and -NH-, -N(R₅)-, and -N(R₉)- said heterocycle group optionally
25 containing one or more double bonds, said heterocycle group optionally comprising one or more aromatic rings,

and said cyclic group optionally being singly or multiply substituted by $-Q_1$;

each Ar_4 is a cyclic group independently selected from the set consisting of an aryl group which contains
5 6, 10, 12, or 14 carbon atoms and between 1 and 3 rings, and a heterocycle group containing between 5 and 15 ring atoms and between 1 and 3 rings, said heterocyclic group containing at least one heteroatom group selected from $-O-$, $-S-$, $-SO-$, SO_2 , $=N-$, $-NH-$,
10 $-N(R_5)-$, and $-N(R_9)-$ said heterocycle group optionally containing one or more double bonds, said heterocycle group optionally comprising one or more aromatic rings, and said cyclic group optionally being singly or multiply substituted by $-Q_1$;

15 each Q_1 is independently selected from the group consisting of $-NH_2$, $-CO_2H$, $-Cl$, $-F$, $-Br$, $-I$, $-NO_2$, $-CN$, $=O$, $-OH$, $-perfluoro\ C_{1-3}\ alkyl$, R_5 , $-OR_5$, $-NHR_5$, $-OR_9$, $-N(R_9)(R_{10})$, $-R_9$, $-C(O)-R_{10}$, and

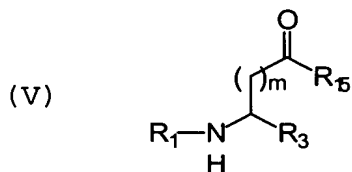
20



provided that when $-Ar_3$ is substituted with a Q_1 group which comprises one or more additional $-Ar_3$
25 groups, said additional $-Ar_3$ groups are not substituted with another $-Ar_3$.

63-65. (canceled)

30 66. (previously presented) A compound represented by the formula:



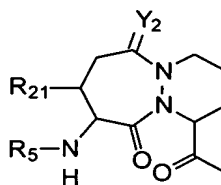
wherein:

m is 1 or 2;

5

R₁ is:

(e10-B)



;

R₃ is selected from the group consisting of:

10

- CN,
- C(O)-H,
- C(O)-CH₂-T₁-R₁₁,
- C(O)-CH₂-F,
- C=N-O-R₉, and
- CO-Ar₂;

15

each R₅ is -C(O)C(O)-OR₁₀;

Y₂ is H₂ or O;

each T₁ is independently selected from the group consisting of -O-, -S-, -S(O)-, and -S(O)₂-;

20

each R₉ is independently selected from the group consisting of -Ar₃ and a -C₁₋₆ straight or branched alkyl group optionally substituted with -Ar₃, wherein the -C₁₋₆ alkyl group is optionally unsaturated;

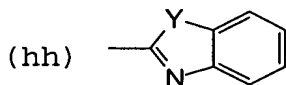
each R_{10} is independently selected from the group consisting of -H, -Ar₃, a -C₃₋₆ cycloalkyl group, and a -C₁₋₆ straight or branched alkyl group optionally substituted with -Ar₃, wherein the -C₁₋₆ alkyl group is
5 optionally unsaturated;

each R_{11} is independently selected from the group consisting of:
-Ar₄,
- (CH₂)₁₋₃-Ar₄,
10 -H, and
-C(O)-Ar₄;

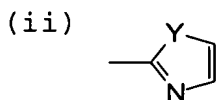
R_{15} is selected from the group consisting of -OH, -OAr₃, -N(H)-OH, and -OC₁₋₆, wherein C₁₋₆ is a straight or branched alkyl group optionally substituted with
15 -Ar₃, -CONH₂, -OR₅, -OH, -OR₉, or -CO₂H;

each R_{21} is independently selected from the group consisting of -H or a -C₁₋₆ straight or branched alkyl group;

Ar₂ is independently selected from the following
20 group, in which any ring may optionally be singly or multiply substituted by -Q₁ or phenyl, optionally substituted by Q₁:



, and



wherein each Y is independently selected from the group consisting of O and S;

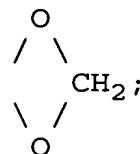
5 each Ar₃ is a cyclic group independently selected from the set consisting of an aryl group which contains 6, 10, 12, or 14 carbon atoms and between 1 and 3 rings and an aromatic heterocycle group containing between 5 and 15 ring atoms and between 1 and 3 rings, said
10 heterocyclic group containing at least one heteroatom group selected from -O-, -S-, -SO-, SO₂, =N-, and -NH-, -N(R₅)-, and -N(R₉)- said heterocycle group optionally containing one or more double bonds, said heterocycle group optionally comprising one or more aromatic rings,
15 and said cyclic group optionally being singly or multiply substituted by -Q₁;

 each Ar₄ is a cyclic group independently selected from the set consisting of an aryl group which contains 6, 10, 12, or 14 carbon atoms and between 1 and 3
20 rings, and a heterocycle group containing between 5 and 15 ring atoms and between 1 and 3 rings, said heterocyclic group containing at least one heteroatom group selected from -O-, -S-, -SO-, SO₂, =N-, -NH-, -N(R₅)-, and -N(R₉)- said heterocycle group optionally
25 containing one or more double bonds, said heterocycle group optionally comprising one or more aromatic rings, and said cyclic group optionally being singly or multiply substituted by -Q₁;

each Q₁ is independently selected from the group

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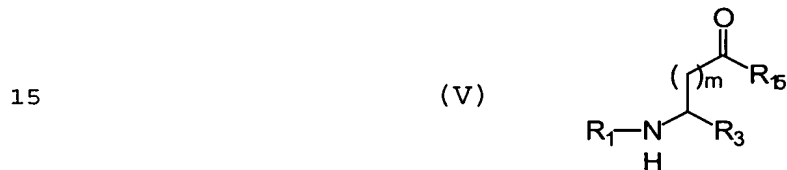
consisting of $-\text{NH}_2$, $-\text{CO}_2\text{H}$, $-\text{Cl}$, $-\text{F}$, $-\text{Br}$, $-\text{I}$, $-\text{NO}_2$, $-\text{CN}$,
 $=\text{O}$, $-\text{OH}$, -perfluoro C_{1-3} alkyl, R_5 , $-\text{OR}_5$, $-\text{NHR}_5$, $-\text{OR}_9$,
 $-\text{N}(\text{R}_9)(\text{R}_{10})$, $-\text{R}_9$, $-\text{C}(\text{O})-\text{R}_{10}$, and



provided that when $-\text{Ar}_3$ is substituted with a Q_1
group which comprises one or more additional $-\text{Ar}_3$
10 groups, said additional $-\text{Ar}_3$ groups are not substituted
with another $-\text{Ar}_3$.

67. (canceled)

68. (previously presented) A compound
represented by the formula:

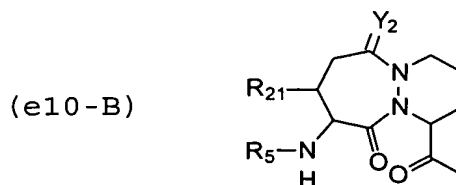


wherein:

m is 1 or 2;

R_1 is:

20



R_3 is selected from the group consisting of:
 $-\text{CN}$,

5 -C(O)-H,
 -C(O)-CH₂-T₁-R₁₁,
 -C(O)-CH₂-F,
 -C=N-O-R₉, and
 -CO-Ar₂;

each R₅ is independently selected from the group
consisting of:

10 -C(O)-R₁₀,
 -C(O)O-R₉,
 -C(O)-N(R₁₀)(R₁₀)
 -S(O)₂-R₉,
 -S(O)₂-NH-R₁₀,
 -C(O)-CH₂-O-R₉,
 -C(O)C(O)-R₁₀,
15 -R₉,
 -H,
 -C(O)C(O)-OR₁₀, and
 -C(O)C(O)-N(R₉)(R₁₀);

20 Y₂ is H₂ or O;

each T₁ is independently selected from the group
consisting of -O-, -S-, -S(O)-, and -S(O)₂-;

25 each R₉ is independently selected from the group
consisting of -Ar₃ and a -C₁₋₆ straight or branched
alkyl group optionally substituted with -Ar₃, wherein
the -C₁₋₆ alkyl group is optionally unsaturated;

30 each R₁₀ is independently selected from the group
consisting of -H, -Ar₃, a -C₃₋₆ cycloalkyl group, and a
-C₁₋₆ straight or branched alkyl group optionally

substituted with $-\text{Ar}_3$, wherein the $-\text{C}_{1-6}$ alkyl group is optionally unsaturated;

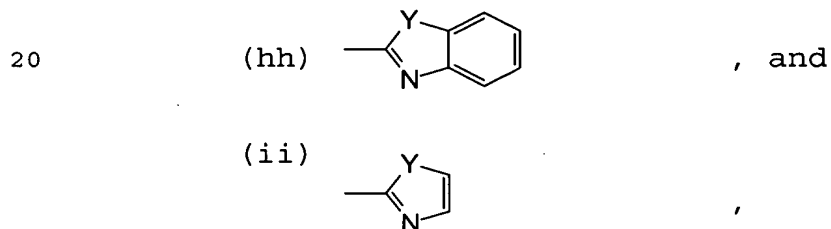
each R_{11} is independently selected from the group consisting of:

- 5 $-\text{Ar}_4$,
 $-(\text{CH}_2)_{1-3}-\text{Ar}_4$,
 $-\text{H}$, and
 $-\text{C}(\text{O})-\text{Ar}_4$;

10 R_{15} is selected from the group consisting of $-\text{OH}$,
 $-\text{OAr}_3$, $-\text{N}(\text{H})-\text{OH}$, and $-\text{OC}_{1-6}$, wherein C_{1-6} is a straight
 or branched alkyl group optionally substituted with
 $-\text{Ar}_3$, $-\text{CONH}_2$, $-\text{OR}_5$, $-\text{OH}$, $-\text{OR}_9$, or $-\text{CO}_2\text{H}$;

15 each R_{21} is independently selected from the group
 consisting of $-\text{H}$ or a $-\text{C}_{1-6}$ straight or branched alkyl
 group;

Ar_2 is independently selected from the following
 group, in which any ring may optionally be singly or
 multiply substituted by $-\text{Q}_1$ or phenyl, optionally
 substituted by Q_1 :

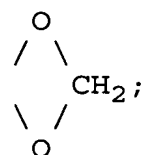


 wherein each Y is independently selected from the
 group consisting of O and S ;

each Ar₃ is a cyclic group independently selected from the set consisting of an aryl group which contains 6, 10, 12, or 14 carbon atoms and between 1 and 3 rings and an aromatic heterocycle group containing between 5 and 15 ring atoms and between 1 and 3 rings, said heterocyclic group containing at least one heteroatom group selected from -O-, -S-, -SO-, SO₂, =N-, and -NH-, -N(R₅)-, and -N(R₉)- said heterocycle group optionally containing one or more double bonds, said heterocycle group optionally comprising one or more aromatic rings, and said cyclic group optionally being singly or multiply substituted by -Q₁;

each Ar₄ is a cyclic group independently selected from the set consisting of an aryl group which contains 6, 10, 12, or 14 carbon atoms and between 1 and 3 rings, and a heterocycle group containing between 5 and 15 ring atoms and between 1 and 3 rings, said heterocyclic group containing at least one heteroatom group selected from -O-, -S-, -SO-, SO₂, =N-, -NH-, -N(R₅)-, and -N(R₉)- said heterocycle group optionally containing one or more double bonds, said heterocycle group optionally comprising one or more aromatic rings, and said cyclic group optionally being singly or multiply substituted by -Q₁;

each Q₁ is independently selected from the group consisting of -NH₂, -CO₂H, -Cl, -F, -Br, -I, -NO₂, -CN, =O, -OH, -perfluoro C₁₋₃ alkyl, R₅, -OR₅, -NHR₅, -OR₉, -N(R₉)(R₁₀), -R₉, -C(O)-R₁₀, and



provided that when $-Ar_3$ is substituted with a Q_1 group which comprises one or more additional $-Ar_3$ groups, said additional $-Ar_3$ groups are not substituted with another $-Ar_3$;

5 provided that when:

m is 1;

R_{15} is $-OH$;

R_{21} is $-H$; and

Y_2 is O and R_3 is $-C(O)-H$, then R_5 cannot be:
10 $-C(O)-R_{10}$, wherein R_{10} is $-Ar_3$ and the Ar_3 cyclic group is phenyl, unsubstituted by $-Q_1$, 4-(carboxymethoxy)phenyl, 2-fluorophenyl, 2-pyridyl, N-(4-methylpiperazino)methylphenyl, or
 $-C(O)-OR_9$, wherein R_9 is $-CH_2-Ar_3$, and the Ar_3
15 cyclic group is phenyl, unsubstituted by $-Q_1$; and when

Y_2 is O, R_3 is $-C(O)-CH_2-T_1-R_{11}$, T_1 is O, and R_{11} is Ar_4 , wherein the Ar_4 cyclic group is 5-(1-(4-chlorophenyl)-3-trifluoromethyl)pyrazolyl), then R_5 cannot be:

20 $-H$;

$-C(O)-R_{10}$, wherein R_{10} is $-Ar_3$ and the Ar_3 cyclic group is 4-(dimethylaminomethyl)phenyl, phenyl, 4-(carboxymethylthio)phenyl, 4-(carboxyethylthio)phenyl, 4-(carboxyethyl)phenyl, 4-(carboxypropyl)phenyl, 2-fluorophenyl, 2-pyridyl, N-(4-methylpiperazino)methylphenyl, or

25 $-C(O)-OR_9$, wherein R_9 is isobutyl or $-CH_2-Ar_3$ and the Ar_3 cyclic group is phenyl;

and when R_{11} is Ar_4 , wherein the Ar_4 cyclic group

is 5-(1-phenyl-3-trifluoromethyl)pyrazolyl or 5-(1-(4-chloro-2-pyridinyl)-3-trifluoromethyl)pyrazolyl, then R_5 cannot be:

5 $-C(O)-OR_9$, wherein R_9 is $-CH_2-Ar_3$, and the Ar_3 cyclic group is phenyl;

and when R_{11} is Ar_4 , wherein the Ar_4 cyclic group is 5-(1-(2-pyridyl)-3-trifluoromethyl)pyrazolyl), then R_5 cannot be:

10 $-C(O)-R_{10}$, wherein R_{10} is $-Ar_3$ and the Ar_3 cyclic group is 4-(dimethylaminomethyl)phenyl, or

$-C(O)-OR_9$, wherein R_9 is $-CH_2-Ar_3$, and the Ar_3 cyclic group is phenyl, unsubstituted by $-Q_1$; and when

15 Y_2 is O, R_3 is $-C(O)-CH_2-T_1-R_{11}$, T_1 is O, and R_{11} is $-C(O)-Ar_4$, wherein the Ar_4 cyclic group is 2,5-dichlorophenyl, then R_5 cannot be:

$-C(O)-R_{10}$, wherein R_{10} is $-Ar_3$ and the Ar_3 cyclic group is 4-(dimethylaminomethyl)phenyl, 4-(N-morpholinomethyl)phenyl, 4-(N-methylpiperazino)methyl)phenyl, 4-(N-(2-methyl)imidazolylmethyl)phenyl, 5-benzimidazolyl, 5-benzotriazolyl, N-carboethoxy-5-benzotriazolyl, N-carboethoxy-5-benzimidazolyl, or

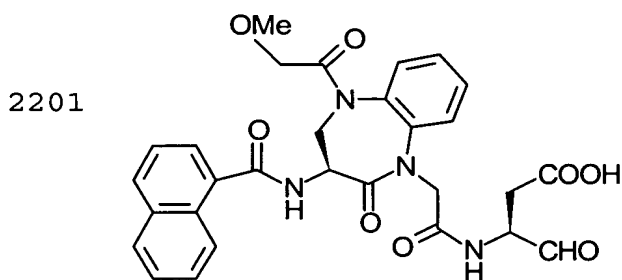
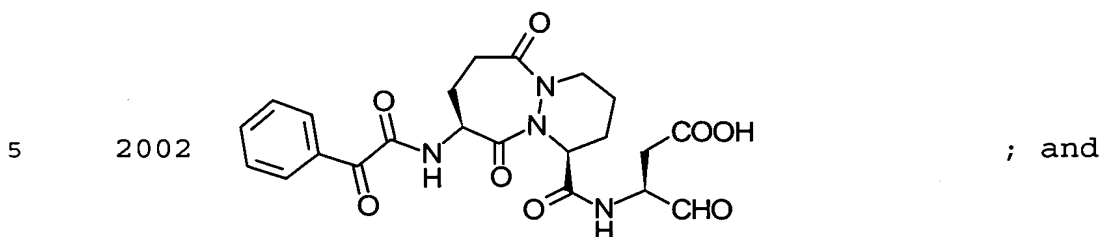
$-C(O)-OR_9$, wherein R_9 is $-CH_2-Ar_3$, and the Ar_3 cyclic group is phenyl, unsubstituted by $-Q_1$; and when

25 Y_2 is H_2 , R_3 is $-C(O)-CH_2-T_1-R_{11}$, T_1 is O, and R_{11} is $-C(O)-Ar_4$, wherein the Ar_4 cyclic group is 2,5-dichlorophenyl, then R_5 cannot be:

$-C(O)-OR_9$, wherein R_9 is $-CH_2-Ar_3$ and the Ar_3 cyclic group is phenyl.

69-78. (canceled)

79. (previously presented) The compound according to claim 68, selected from the group consisting of:

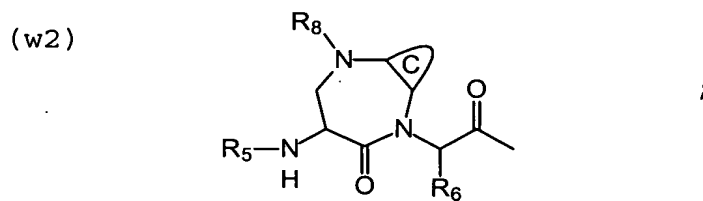
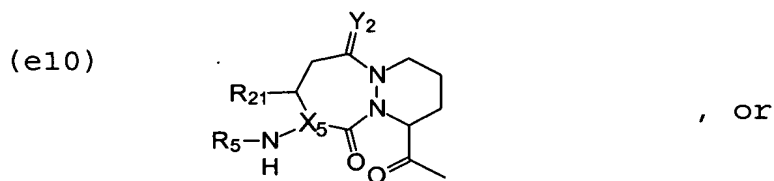


80. (previously presented) A compound represented by the formula:



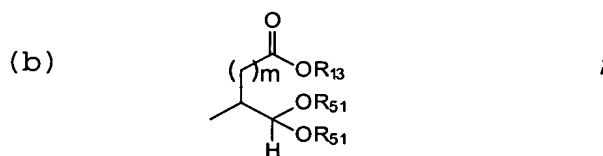
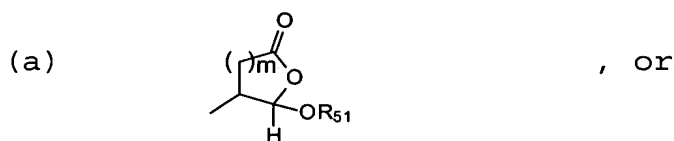
wherein:

R_1 is:



5 C is a ring chosen from the set consisting of benzo, pyrido, thieno, pyrrolo, furano, thiazolo, isothiazolo, oxazolo, isoxazolo, pyrimido, imidazolo, cyclopentyl, and cyclohexyl; the ring optionally being singly or multiply substituted by -Q₁;

10 R₂ is:



m is 1 or 2;

15 each R₅ is independently selected from the group consisting of:

- C(O)-R₁₀,
- C(O)O-R₉,

5 -C(O)-N(R₁₀)(R₁₀)
 -S(O)₂-R₉,
 -S(O)₂-NH-R₁₀,
 -C(O)-CH₂-O-R₉,
 -C(O)C(O)-R₁₀,
 -R₉,
 -H,
 -C(O)C(O)-OR₁₀, and
 -C(O)C(O)-N(R₉)(R₁₀);

10 X₅ is CH or N;

 Y₂ is H₂ or O;

15 R₆ is selected from the group consisting of -H and
 -CH₃;

 R₈ is selected from the group consisting of:

 -C(O)-R₁₀,
 -C(O)O-R₉,
20 -C(O)-N(H)-R₁₀,
 -S(O)₂-R₉,
 -S(O)₂-NH-R₁₀,
 -C(O)-CH₂-OR₁₀,
 -C(O)C(O)-R₁₀;
25 -C(O)-CH₂N(R₁₀)(R₁₀),
 -C(O)-CH₂C(O)-O-R₉,
 -C(O)-CH₂C(O)-R₉,
 -H, and
 -C(O)-C(O)-OR₁₀;

30 each R₉ is independently selected from the group
 consisting of -Ar₃ and a -C₁₋₆ straight or branched

alkyl group optionally substituted with -Ar₃, wherein
the -C₁₋₆ alkyl group is optionally unsaturated;

each R₁₀ is independently selected from the group
consisting of -H, -Ar₃, a -C₃₋₆ cycloalkyl group, and a
5 -C₁₋₆ straight or branched alkyl group optionally
substituted with -Ar₃, wherein the -C₁₋₆ alkyl group is
optionally unsaturated;

R₁₃ is selected from the group consisting of H,
Ar₃, and a -C₁₋₆ straight or branched alkyl group
10 optionally substituted with -Ar₃, -CONH₂, -OR₅, -OH,
-OR₉, or -CO₂H;

each R₅₁ is independently selected from the group
consisting of R₉, -C(O)-R₉, -C(O)-N(H)-R₉, or each R₅₁
taken together forms a saturated 4-8 member carbocyclic
15 ring or heterocyclic ring containing -O-, -S-, or -NH-;

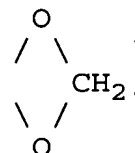
each R₂₁ is independently selected from the group
consisting of -H or a -C₁₋₆ straight or branched alkyl
group;

each Ar₃ is a cyclic group independently selected
20 from the set consisting of an aryl group which contains
6, 10, 12, or 14 carbon atoms and between 1 and 3 rings
and an aromatic heterocycle group containing between 5
and 15 ring atoms and between 1 and 3 rings, said
heterocyclic group containing at least one heteroatom
25 group selected from -O-, -S-, -SO-, SO₂, =N-, and -NH-,
said heterocycle group optionally containing one or
more double bonds, said heterocycle group optionally
comprising one or more aromatic rings, and said cyclic

group optionally being singly or multiply substituted
by $-Q_1$;

each Q_1 is independently selected from the group
5 consisting of $-\text{NH}_2$, $-\text{CO}_2\text{H}$, $-\text{Cl}$, $-\text{F}$, $-\text{Br}$, $-\text{I}$, $-\text{NO}_2$, $-\text{CN}$,
 $=\text{O}$, $-\text{OH}$, -perfluoro C_{1-3} alkyl, R_5 , $-\text{OR}_5$, $-\text{NHR}_5$, $-\text{OR}_9$,
 $-\text{N}(\text{R}_9)(\text{R}_{10})$, $-\text{R}_9$, $-\text{C}(\text{O})-\text{R}_{10}$, and

10



provided that when $-\text{Ar}_3$ is substituted with a Q_1
group which comprises one or more additional $-\text{Ar}_3$
15 groups, said additional $-\text{Ar}_3$ groups are not substituted
with another $-\text{Ar}_3$.

81. (previously presented) The compound
according to claim 80, wherein:

m is 1;

20 C is a ring chosen from the set consisting of
benzo, pyrido, or thieno the ring optionally being
singly or multiply substituted by halogen, $-\text{NH}_2$,
 $-\text{NH}-\text{R}_5$, $-\text{NH}-\text{R}_9$, $-\text{OR}_{10}$, or $-\text{R}_9$, wherein R_9 is a straight
or branched C_{1-4} alkyl group, and R_{10} is H or a straight
25 or branched C_{1-4} alkyl group;

R_6 is H;

R_{13} is H or a C_{1-4} straight or branched alkyl group
optionally substituted with $-\text{Ar}_3$, $-\text{OH}$, $-\text{OR}_9$, $-\text{CO}_2\text{H}$,
wherein the R_9 is a C_{1-4} branched or straight chain
30 alkyl group; wherein Ar_3 is morpholinyl or phenyl,

wherein the phenyl is optionally substituted by $-Q_1$;

R_{21} is $-H$ or $-CH_3$;

R_{51} is a C_{1-6} straight or branched alkyl group
optionally substituted with $-Ar_3$, wherein Ar_3 is
5 phenyl, optionally substituted by $-Q_1$;

each Ar_3 cyclic group is independently selected
from the set consisting of phenyl, naphthyl, thienyl,
quinolinyl, isoquinolinyl, pyrazolyl, thiazolyl,
isoxazolyl, benzotriazolyl, benzimidazolyl,
10 thienothienyl, imidazolyl, thiadiazolyl,
benzo[b]thiophenyl, pyridyl, benzofuranyl, and indolyl,
and said cyclic group optionally being singly or
multiply substituted by $-Q_1$;

each Q_1 is independently selected from the group
15 consisting of $-NH_2$, $-Cl$, $-F$, $-Br$, $-OH$, $-R_9$, $-NH-R_5$
wherein R_5 is $-C(O)-R_{10}$ or $-S(O)_2-R_9$, $-OR_5$ wherein R_5 is
 $-C(O)-R_{10}$, $-OR_9$, $-NHR_9$, and



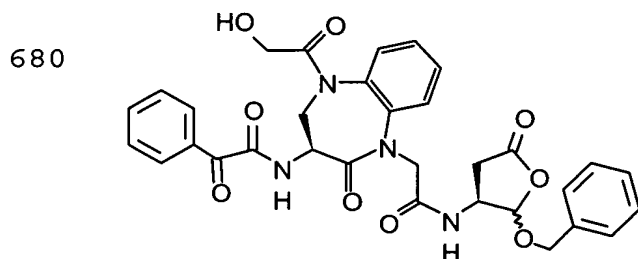
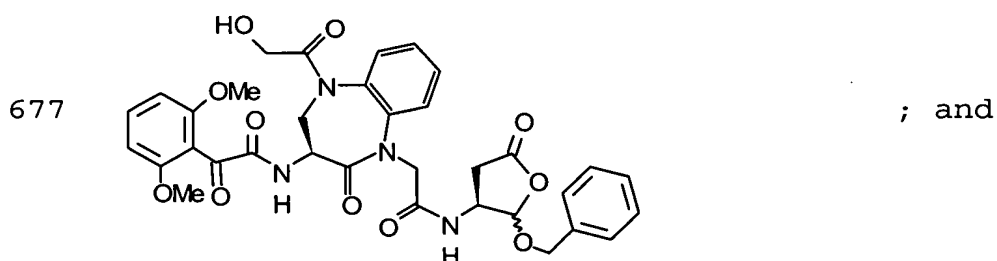
wherein each R_9 and R_{10} are independently a $-C_{1-6}$
straight or branched alkyl group optionally substituted
25 with $-Ar_3$ wherein Ar_3 is phenyl;

provided that when $-Ar_3$ is substituted with a Q_1
group which comprises one or more additional $-Ar_3$
groups, said additional $-Ar_3$ groups are not substituted
30 with another $-Ar_3$.

82. (previously presented) The compound according to claim 81, wherein R_1 is (w2).

83. (previously presented) The compound according to claim 82, selected from the group consisting of:

5



84-87. (canceled)

88. (previously presented) The compound according to claim 80 wherein R_5 is $-C(O)-R_{10}$ or $-C(O)-C(O)-R_{10}$.

10

89. (previously presented) The compound according to claim 88, wherein R_{10} is Ar_3 .

90. (previously presented) The compound according to claim 89, wherein:

15

R_5 is $-C(O)-R_{10}$ and R_{10} is Ar_3 , wherein the Ar_3 cyclic group is phenyl optionally being singly or

multiply substituted by:

-R₉, wherein R₉ is a C₁₋₄ straight or branched alkyl group;

-F,

5

-Cl,

-N(H)-R₅, wherein -R₅ is -H or -C(O)-R₁₀, wherein R₁₀ is a -C₁₋₆ straight or branched alkyl group optionally substituted with -Ar₃, wherein Ar₃ is phenyl,

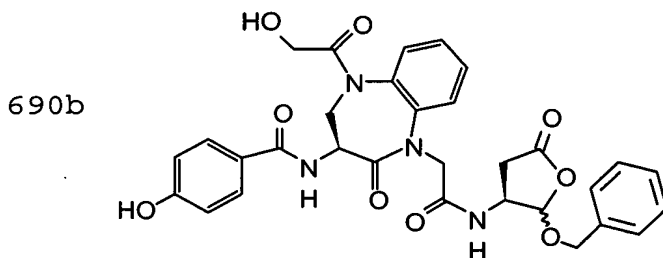
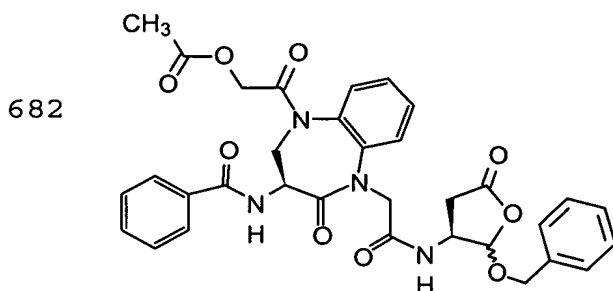
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-N(R₉)(R₁₀), wherein R₉ and R₁₀ are independently a -C₁₋₄ straight or branched alkyl group, or

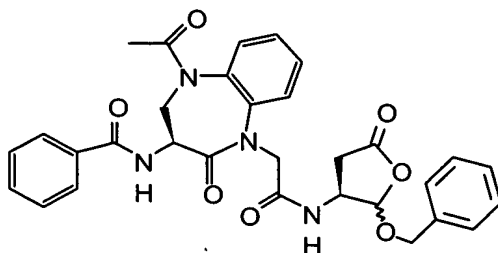
-O-R₅, wherein R₅ is H or a -C₁₋₄ straight or branched alkyl group.

15

91. (previously presented) The compound according to claim 90, selected from the group consisting of:

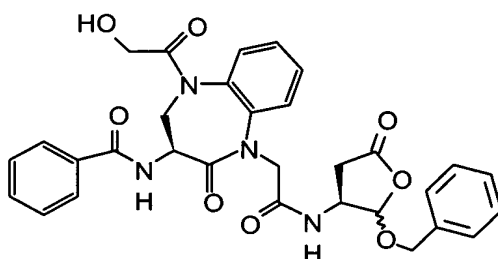


693



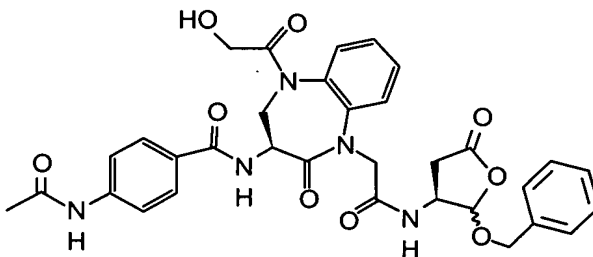
;

695a



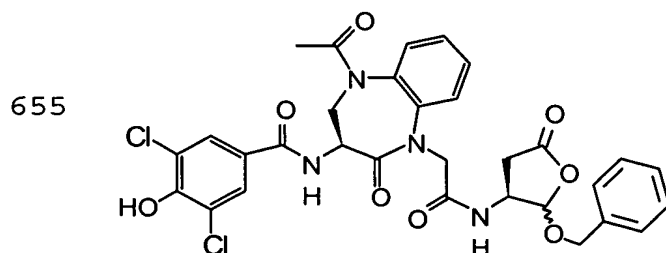
; and

695b

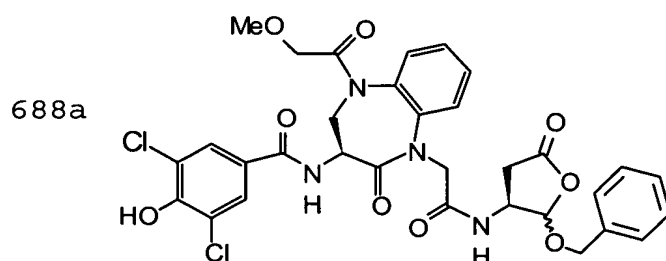


92. (previously presented) The compound
5 according to claim 90, wherein Ar_3 is phenyl being
singly or multiply substituted at the 3- or 5-position
by -Cl or at the 4-position by -NH- R_5 , -N(R_9)(R_{10}), or
-O- R_5 .

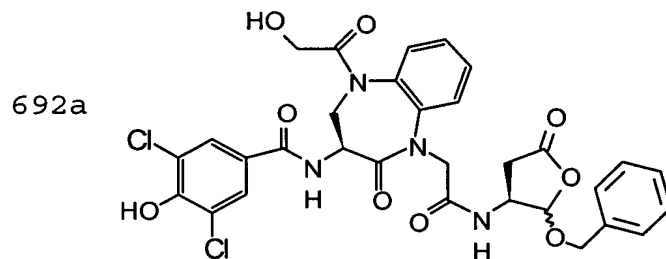
93. (previously presented) The compound
10 according to claim 92, selected from the group
consisting of:



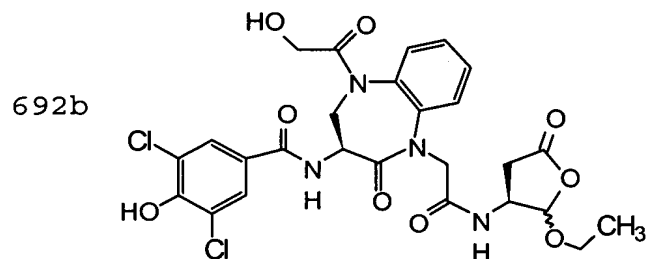
;



;



; and



5

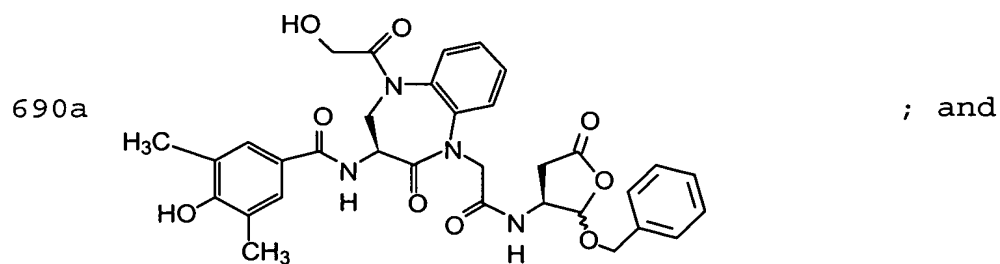
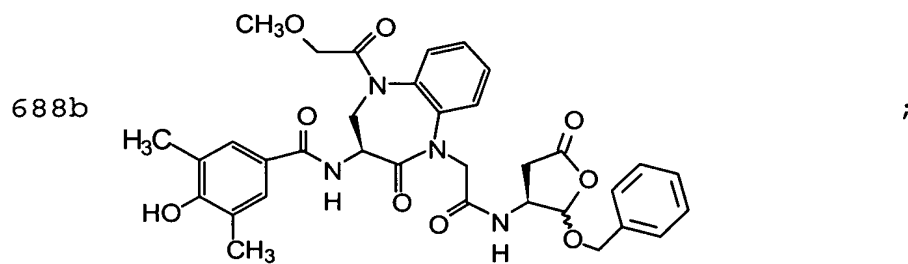
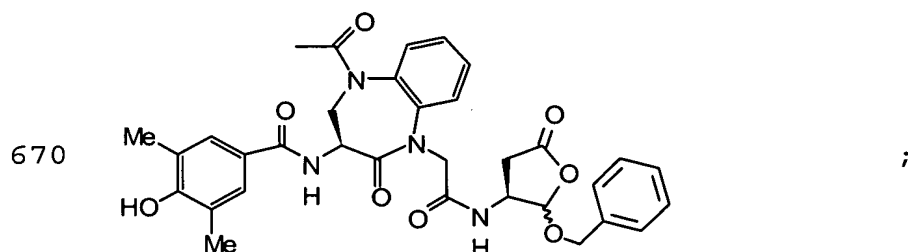
94. (canceled)

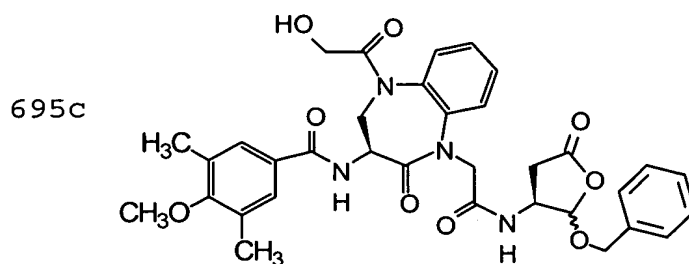
95. (previously presented) The compound according to claim 90, wherein Ar_3 is phenyl being singly or multiply substituted at the 3- or 5-position by $-R_9$, wherein R_9 is a C_{1-4} straight or branched alkyl

group;

and at the 4-position by -O-R₅.

96. (previously presented) The compound
according to claim 95, selected from the group
5 consisting of:





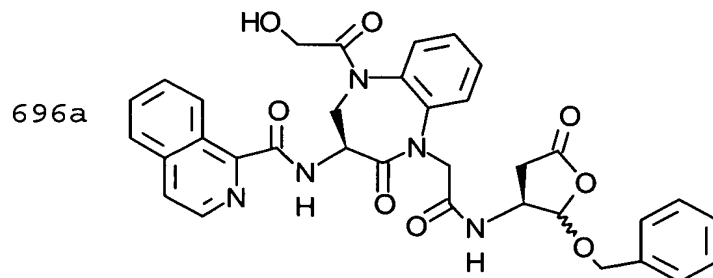
97. (canceled)

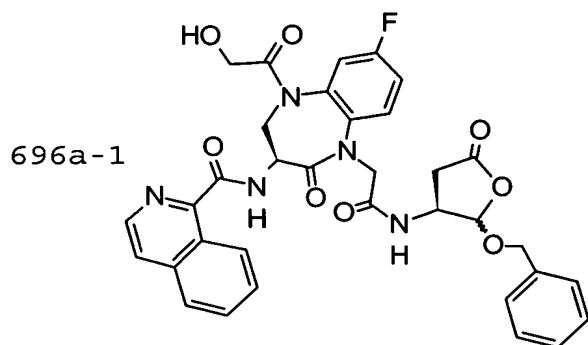
98. (previously presented) The compound according to claim 89, wherein:

5 R_5 is $-C(O)-R_{10}$, wherein R_{10} is Ar_3 and the Ar_3 cyclic group is selected from the group consisting of is indolyl, benzimidazolyl, thienyl, quinolyl, isoquinolyl and benzo[b]thiophenyl, and said cyclic group optionally being singly or multiply substituted
10 by $-Q_1$.

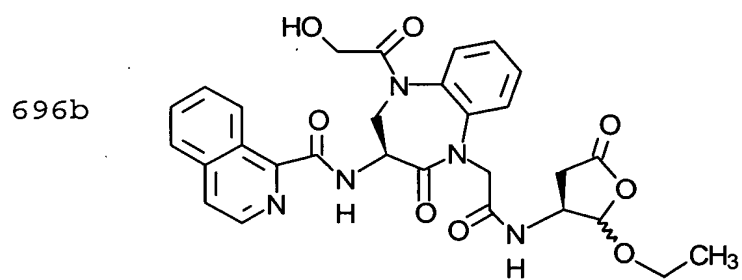
99. (previously presented) The compound according to claim 98, wherein the Ar_3 cyclic group is isoquinolyl, and said cyclic group optionally being singly or multiply substituted by $-Q_1$.

15 100. (previously presented) The compound according to claim 99 selected from the group consisting of:

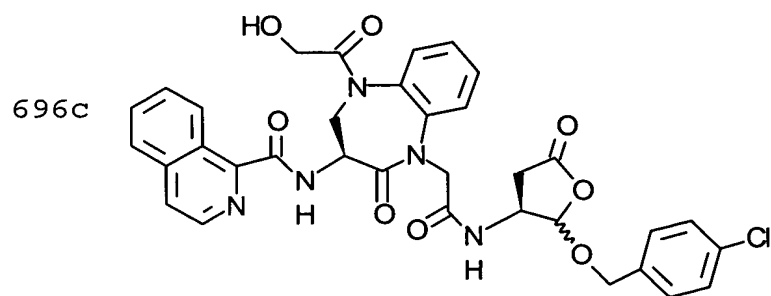




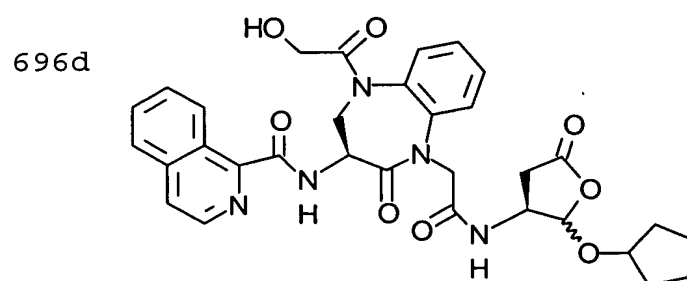
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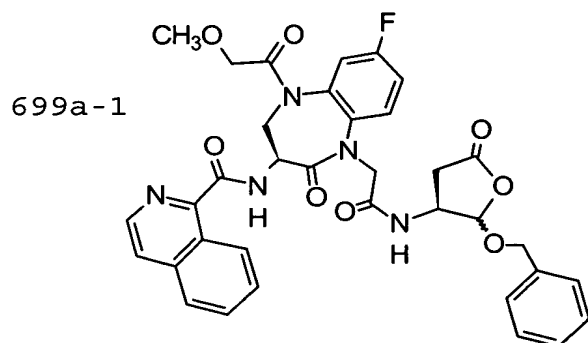
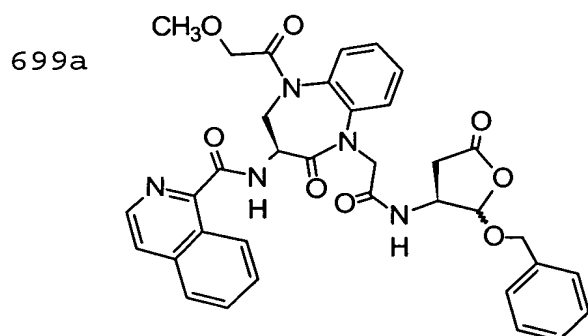
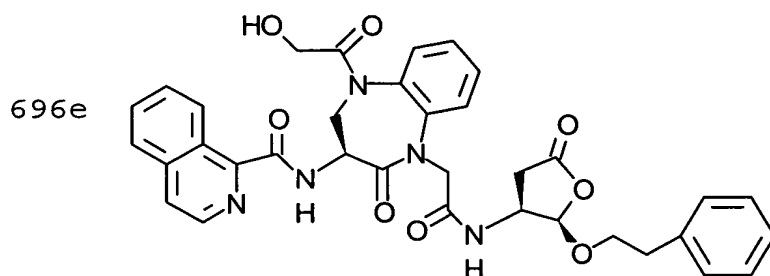
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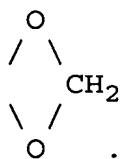
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101. (canceled)

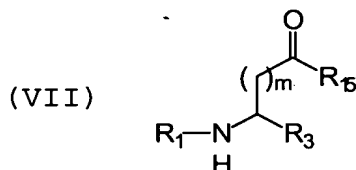
102. (previously presented) The compound according to claim 89, wherein R_5 is $-C(O)-R_{10}$, wherein R_{10} is Ar_3 and the Ar_3 cyclic group is phenyl, substituted by



5

103. (canceled)

104. (previously presented) A compound represented by the formula:

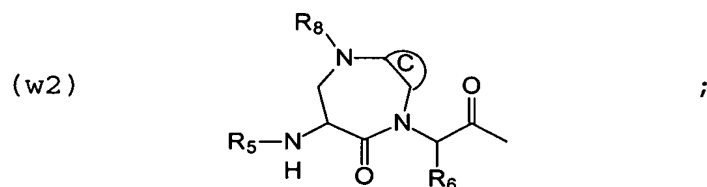


10 wherein:

m is 1 or 2;

R₁ is selected from the group consisting of the following formulae:

15



C is a ring chosen from the set consisting of benzo, pyrido, thieno, pyrrolo, furano, thiazolo, isothiazolo, oxazolo, isoxazolo, pyrimido, imidazolo, cyclopentyl, and cyclohexyl, the ring optionally being singly or multiply substituted by -Q₁;

20

R₃ is selected from the group consisting of:

5 -CN,
 -C(O)-H,
 -C(O)-CH₂-T₁-R₁₁,
 -C(O)-CH₂-F,
 -C=N-O-R₉, and
 -CO-Ar₂;

each R₅ is independently selected from the group
consisting of:

10 -C(O)-R₁₀,
 -C(O)O-R₉,
 -C(O)-N(R₁₀)(R₁₀)
 -S(O)₂-R₉,
 -S(O)₂-NH-R₁₀,
 -C(O)-CH₂-O-R₉,
15 -C(O)C(O)-R₁₀,
 -R₉,
 -H,
 -C(O)C(O)-OR₁₀, and
 -C(O)C(O)-N(R₉)(R₁₀);

20

each T₁ is independently selected from the group
consisting of -O-, -S-, -S(O)-, and -S(O)₂-;

25 R₆ is selected from the group consisting of -H and
 -CH₃;

R₈ is selected from the group consisting of:

30 -C(O)-R₁₀,
 -C(O)O-R₉,
 -C(O)-NH-R₁₀,
 -S(O)₂-R₉,
 -S(O)₂-NH-R₁₀,

5
-C(O)-CH₂-OR₁₀,
-C(O)C(O)-R₁₀,
-C(O)-CH₂-N(R₁₀)(R₁₀),
-C(O)-CH₂C(O)-O-R₉,
-C(O)-CH₂C(O)-R₉,
-H, and
-C(O)-C(O)-OR₁₀;

10 each R₉ is independently selected from the group
consisting of -Ar₃ and a -C₁₋₆ straight or branched
alkyl group optionally substituted with -Ar₃, wherein
the -C₁₋₆ alkyl group is optionally unsaturated;

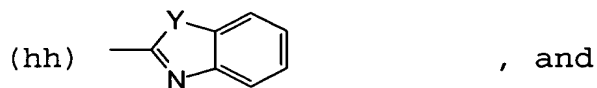
15 each R₁₀ is independently selected from the group
consisting of -H, -Ar₃, a -C₃₋₆ cycloalkyl group, and a
-C₁₋₆ straight or branched alkyl group optionally
substituted with -Ar₃, wherein the -C₁₋₆ alkyl group is
optionally unsaturated;

each R₁₁ is independently selected from the group
consisting of:
20 -Ar₄,
-(CH₂)₁₋₃-Ar₄,
-H, and
-C(O)-Ar₄;

25 R₁₅ is selected from the group consisting of -OH,
-OAr₃, -N(H)-OH, and -OC₁₋₆, wherein C₁₋₆ is a straight
or branched alkyl group optionally substituted with
-Ar₃, -CONH₂, -OR₅, -OH, -OR₉, or -CO₂H;

Ar₂ is independently selected from the following
group, in which any ring may optionally be singly or

multiply substituted by $-Q_1$ or phenyl, optionally substituted by Q_1 :



5

wherein each Y is independently selected from the group consisting of O and S;

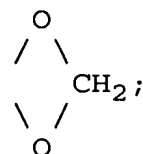
each Ar_3 is a cyclic group independently selected from the set consisting of an aryl group which contains
10 6, 10, 12, or 14 carbon atoms and between 1 and 3 rings and an aromatic heterocycle group containing between 5 and 15 ring atoms and between 1 and 3 rings, said heterocyclic group containing at least one heteroatom group selected from -O-, -S-, -SO-, SO_2 , =N-, and -NH-,
15 -N(R_5)-, and -N(R_9)- said heterocycle group optionally containing one or more double bonds, said heterocycle group optionally comprising one or more aromatic rings, and said cyclic group optionally being singly or multiply substituted by $-Q_1$;

20 each Ar_4 is a cyclic group independently selected from the set consisting of an aryl group which contains 6, 10, 12, or 14 carbon atoms and between 1 and 3 rings, and a heterocycle group containing between 5 and 15 ring atoms and between 1 and 3 rings, said
25 heterocyclic group containing at least one heteroatom group selected from -O-, -S-, -SO-, SO_2 , =N-, -NH-, -N(R_5)-, and -N(R_9)- said heterocycle group optionally

containing one or more double bonds, said heterocycle group optionally comprising one or more aromatic rings, and said cyclic group optionally being singly or multiply substituted by -Q₁;

5 each Q₁ is independently selected from the group consisting of -NH₂, -CO₂H, -Cl, -F, -Br, -I, -NO₂, -CN, =O, -OH, -perfluoro C₁₋₃ alkyl, R₅, -OR₅, -NHR₅, -OR₉, -N(R₉)(R₁₀), -R₉, -C(O)-R₁₀, and

10



provided that when -Ar₃ is substituted with a Q₁ group which comprises one or more additional -Ar₃ groups, said additional -Ar₃ groups are not substituted with another -Ar₃.

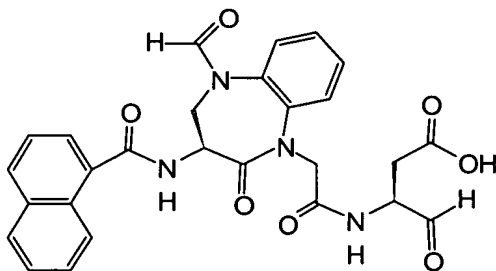
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105-111. (canceled)

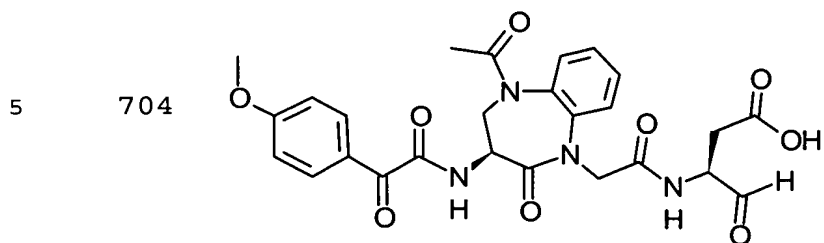
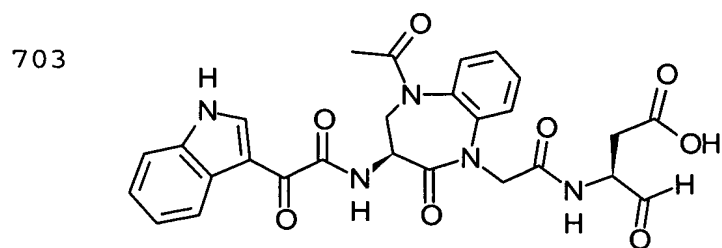
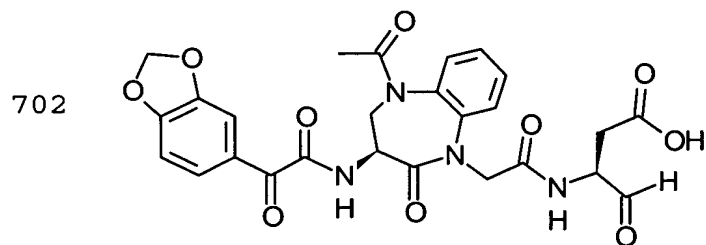
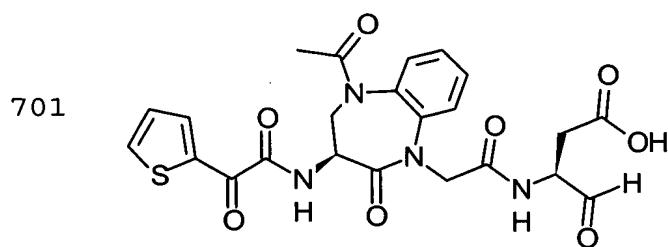
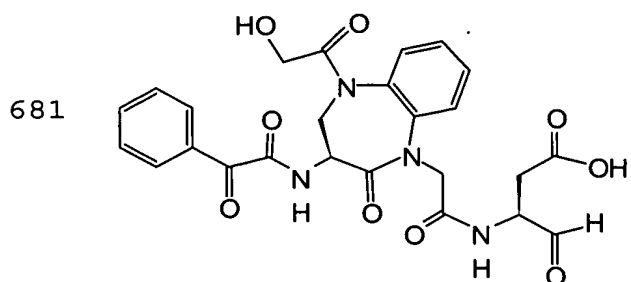
112. (previously presented) The compound according to claim 104, selected from the group consisting of:

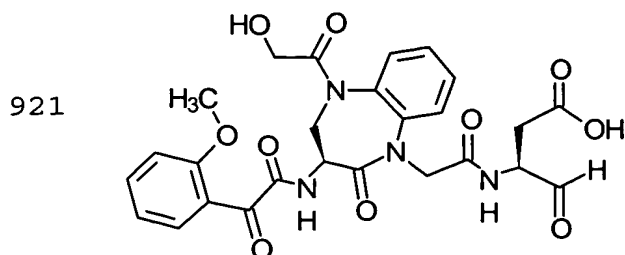
20

653



;





113. (canceled)

114. (previously presented) The compound according to claim 68, wherein:

5 m is 1;

T₁ is O or S;

R₂₁ is -H or -CH₃;

Ar₂ is (hh);

10 Y is O;

each Ar₃ cyclic group is independently selected from the set consisting of phenyl, naphthyl, thienyl, quinolinyl, isoquinolinyl, pyrazolyl, thiazolyl, isoxazolyl, benzotriazolyl, benzimidazolyl, thienothienyl, imidazolyl, thiadiazolyl, benzo[b]thiophenyl, pyridyl, benzofuranyl, and indolyl and said cyclic group being singly or multiply substituted by -Q₁;

20 each Ar₄ cyclic group is independently selected from the set consisting of phenyl, tetrazolyl, pyridinyl, oxazolyl, naphthyl, pyrimidinyl, and thienyl

and said cyclic group being singly or multiply
substituted by

-Q₁;

5 each Q₁ is independently selected from the group
consisting of -NH₂, -Cl, -F, -Br, -OH, -R₉, -NH-R₅
wherein R₅ is -C(O)-R₁₀ or -S(O)₂-R₉, -OR₅ wherein R₅ is
-C(O)-R₁₀, -OR₉, -NHR₉, and



wherein each R₉ and R₁₀ are independently a -C₁₋₆
straight or branched alkyl group optionally substituted
15 with -Ar₃ wherein Ar₃ is phenyl;

provided that when -Ar₃ is substituted with a Q₁
group which comprises one or more additional -Ar₃
groups, said additional -Ar₃ groups are not substituted
20 with another -Ar₃.

115-117. (canceled)

118. (previously presented) The compound
according to claims 104 or 114, wherein R₅ is -C(O)-R₁₀
or -C(O)C(O)-R₁₀.

25 119. (previously presented) The compound
according to claim 118, wherein R₁₀ is Ar₃.

120. (previously presented) The compound
according to claim 119, wherein:

R₅ is -C(O)-R₁₀ and R₁₀ is Ar₃, wherein the Ar₃

cyclic group is phenyl optionally being singly or multiply substituted by:

-R₉, wherein R₉ is a C₁₋₄ straight or branched alkyl group;

5 -F,

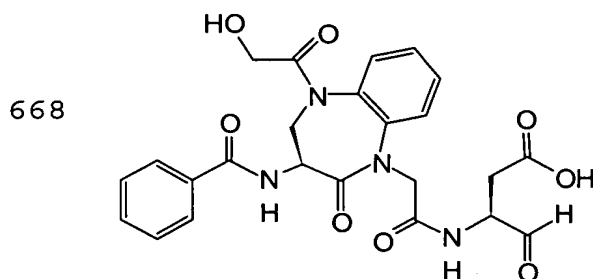
-Cl,

-N(H)-R₅, wherein -R₅ is -H or -C(O)-R₁₀, wherein R₁₀ is a -C₁₋₆ straight or branched alkyl group optionally substituted with -Ar₃, wherein Ar₃ is
10 phenyl,

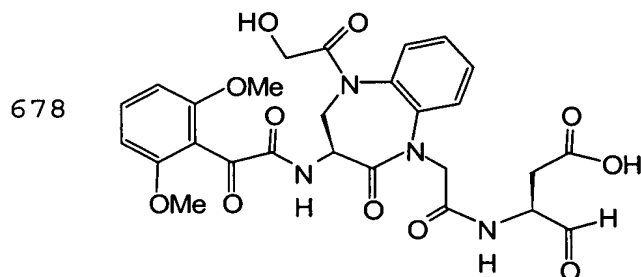
-N(R₉)(R₁₀), wherein R₉ and R₁₀ are independently a -C₁₋₄ straight or branched alkyl group, or

-O-R₅, wherein R₅ is H or a -C₁₋₄ straight or branched alkyl group.

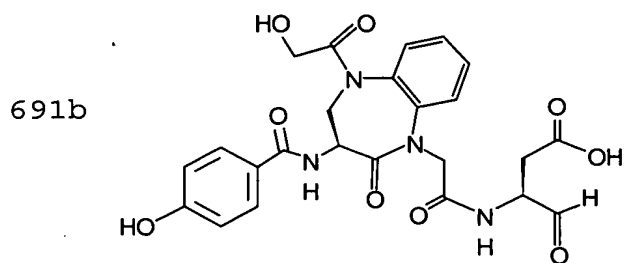
15 121. (previously presented) The compound according to claim 120, selected from the group consisting of:



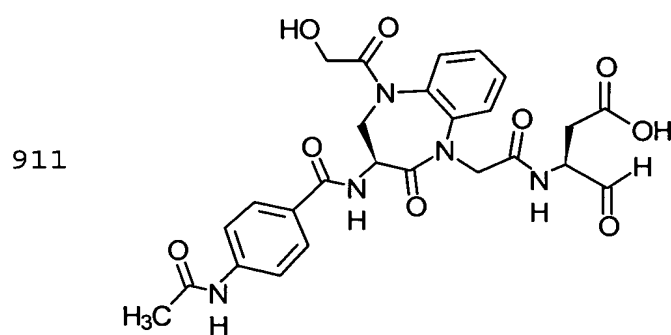
;



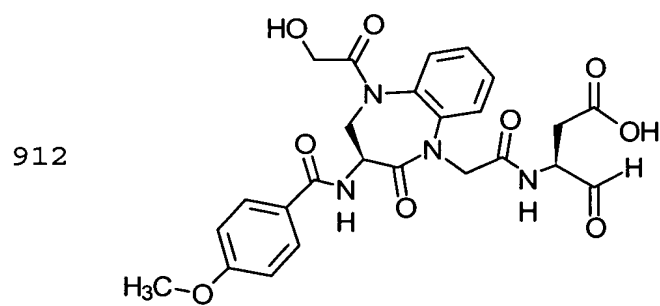
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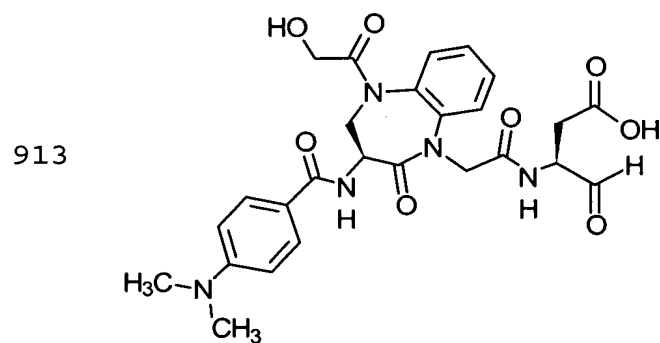
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;



;



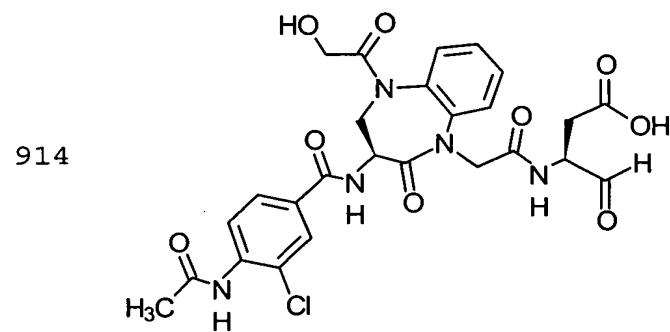
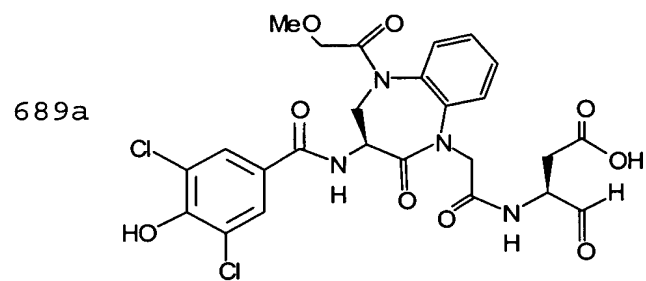
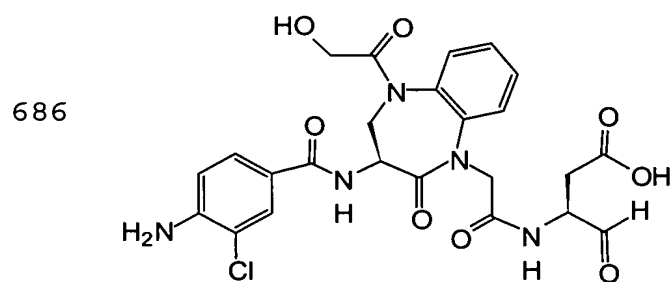
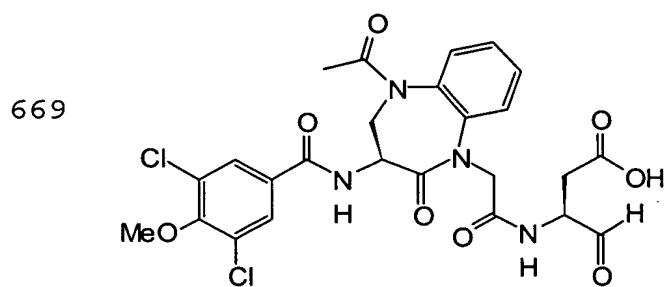
; and

O=C(O)C1=CC=C(C=C1)C(=O)NC2=CC(=O)N(C2)C(=O)N3C(=O)C(=O)N(C3)C(=O)O

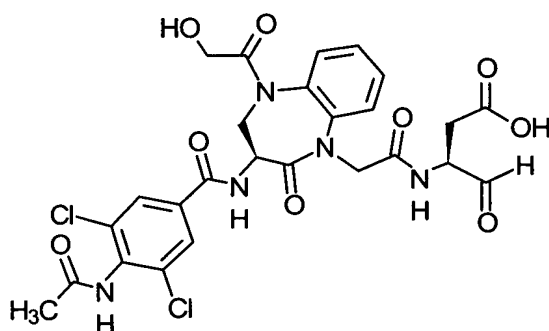
122. (previously presented) The compound according to claim 120, wherein Ar₃ is phenyl being singly or multiply substituted at the 3- or 5-position by -Cl or at the 4-position by -NH-R₅, -N(R₉)(R₁₀), or -O-R₅.

123. (previously presented) The compound according to claim 122, selected from the group consisting of:

CC(=O)N1Cc2ccccc2N(C(=O)NCC(=O)NCC(=O)O)C1=ONC(=O)c3cc(Cl)cc(O)c3ClO=C(O)C1=CC=CC=C1C(=O)NCC2C(=O)N(Cc3ccccc3)C(=O)N2C(=O)Nc4cc(Cl)c(Cl)c(O)c4

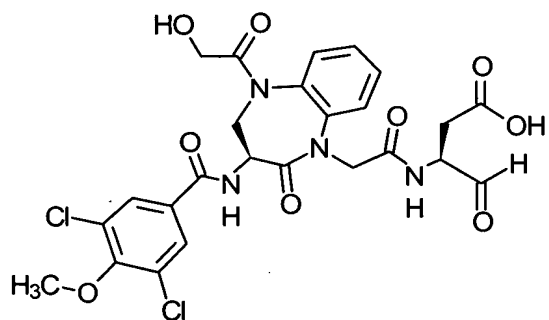


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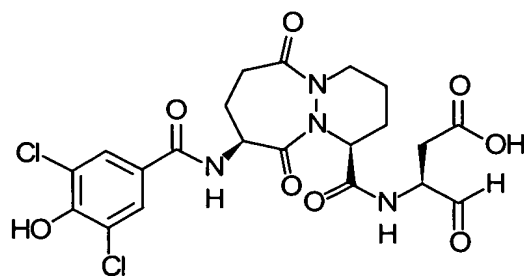
; and

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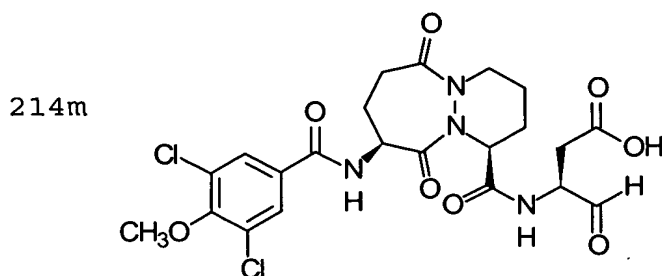


124. (previously presented) The compound
according to claim 122, selected from the group
5 consisting of:

214k

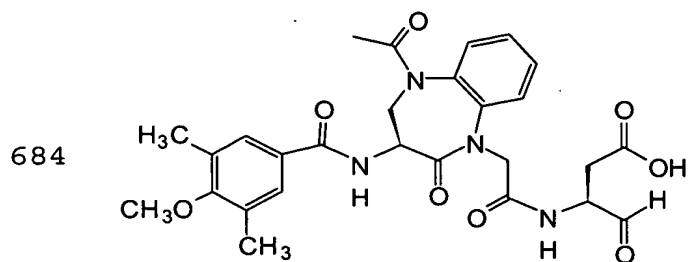
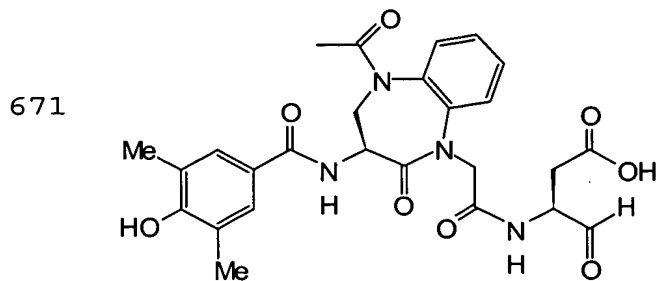


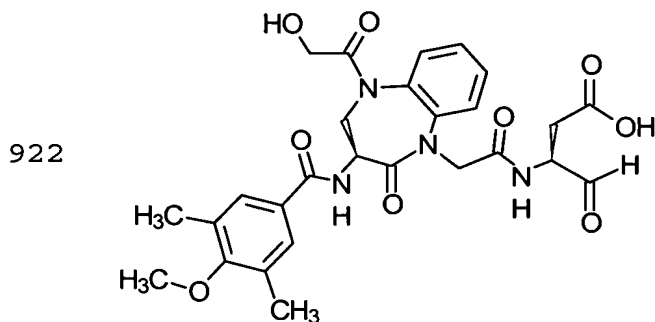
; and



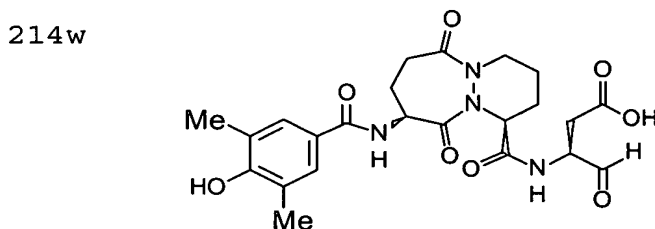
125. (previously presented) The compound according to claim 120, wherein Ar_3 is phenyl being singly or multiply substituted at the 3- or 5-position by $-R_9$, wherein R_9 is a C_{1-4} straight or branched alkyl group;
5 and at the 4-position by $-O-R_5$.

126. (previously presented) The compound according to claim 125, selected from the group
10 consisting of:





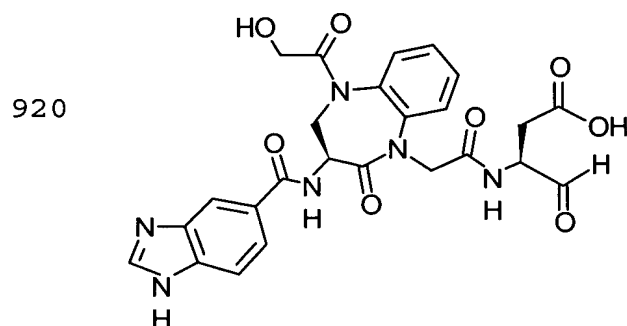
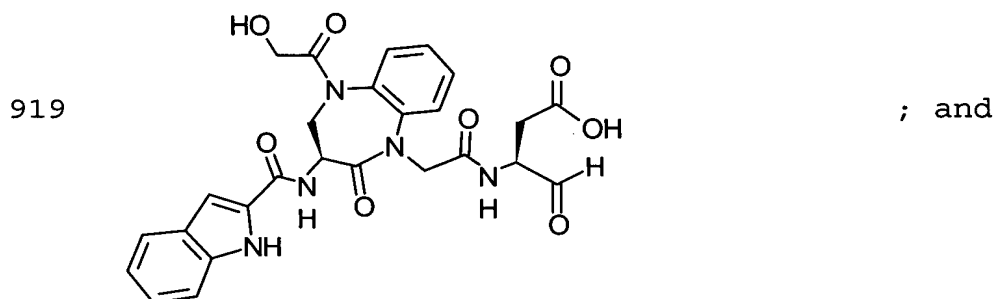
127. (previously presented) The compound according to claim 125, wherein the compound is:



128. (previously presented) The compound according to claim 119, wherein:

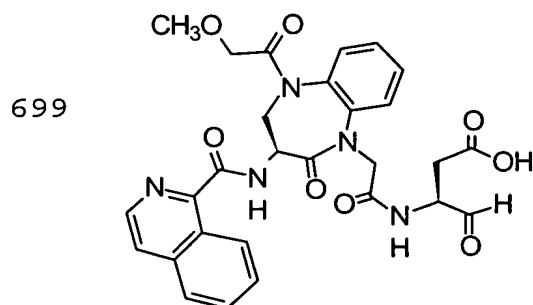
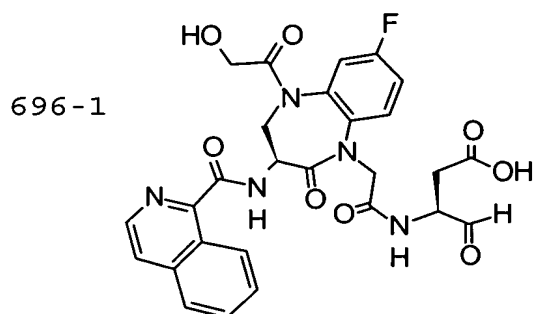
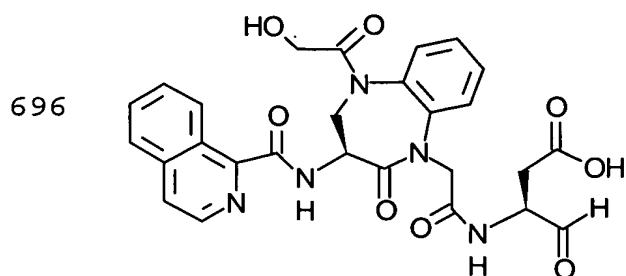
10 R_5 is $-C(O)-R_{10}$, wherein R_{10} is Ar_3 and the Ar_3 cyclic group is selected from the group consisting of is indolyl, benzimidazolyl, thienyl, quinolyl, isoquinolyl and benzo[b]thiophenyl, and said cyclic group optionally being singly or multiply substituted by $-Q_1$.

15 129. (previously presented) The compound according to claim 128, selected from the group consisting of:



130. (previously presented) The compound
according to claim 128, wherein the Ar₃ cyclic group is
5 isoquinolyl, and said cyclic group optionally being
singly or multiply substituted by -Q₁.

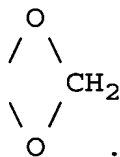
131. (previously presented) The compound
according to claim 130, wherein the compound is:



132. (canceled)

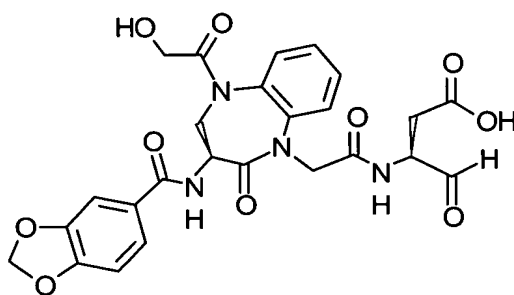
5 133. (previously presented) The compound according to claim 119, wherein R_5 is $-C(O)-R_{10}$, wherein R_{10} is Ar_3 and the Ar_3 cyclic group is phenyl, substituted by

5



134. (previously presented) The compound according to claim 133, wherein the compound is:

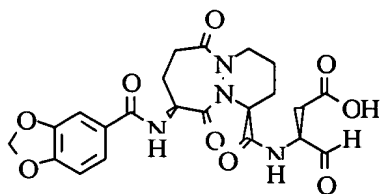
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10

135. (previously presented) The compound according to claim 133, wherein the compound is:

415



136-137. (canceled)

15

138. (previously presented) A method for treating or preventing a disease selected from an IGIF mediated disease, an IFN- γ mediated disease, an inflammatory disease, an autoimmune disease, an infectious disease, a proliferative disease, a neurodegenerative disease, a necrotic disease,

osteoarthritis, acute pancreatitis, chronic
pancreatitis, asthma, rheumatoid arthritis,
inflammatory bowel disease, Crohn's disease, ulcerative
collitis, cerebral ischemia, myocardial ischemia, adult
5 respiratory distress syndrome, infectious hepatitis,
sepsis, septic shock, Shigellosis, glomerulonephritis,
systemic lupus erythematosus, scleroderma, chronic
thyroiditis, Graves' disease, autoimmune gastritis,
insulin-dependent diabetes mellitus (Type I), juvenile
10 diabetes, autoimmune hemolytic anemia, autoimmune
neutropenia, thrombocytopenia, myasthenia gravis,
multiple sclerosis, psoriasis, lichenplanus, graft vs.
host disease, acute dermatomyositis, eczema, primary
cirrhosis, hepatitis, uveitis, Behcet's disease, acute
15 dermatomyositis, atopic skin disease, pure red cell
aplasia, aplastic anemia, amyotrophic lateral sclerosis
and nephrotic syndrome comprising the step of
administering to said patient a pharmaceutical
composition according to claim 42.

20 139. (previously presented) The method
according to claim 138, wherein the disease is selected
from an inflammatory disease; an autoimmune disease, an
infectious disease, rheumatoid arthritis, ulcerative
collitis, Crohn's disease, hepatitis, adult respiratory
25 distress syndrome, glomerulonephritis,
insulin-dependent diabetes mellitus (Type I), juvenile
diabetes, psoriasis, graft vs. host disease, and
hepatitis.

140-153. (canceled)

154. (New) A method for preventing or
treating inflammation, comprising contacting a cell
population with an inhibiting effective amount of a
reagent that suppresses the protease activity of at
5 least one member of the interleukin-1beta-converting
enzyme (ICE)/CED-3 family, thereby preventing or
treating inflammation, wherein said inflammation is due
to an inflammatory disease, and wherein said
inflammatory disease is selected from the group
10 consisting of arthritis, cholangitis, colitis,
encephalitis, endocervicitis, hepatitis, pancreatitis,
and reperfusion injury.

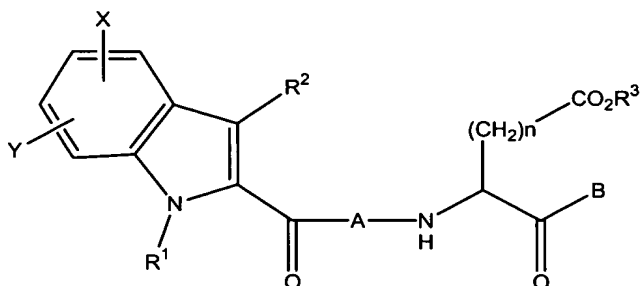
155. (New) The method of claim 135, wherein
said inflammation is chronic inflammation.

156. (New) The method of claim 135, wherein
said inflammation is acute inflammation.

157. (New) The method of claim 135, wherein
the reagent suppresses the protease activity in an
irreversible manner.

158. (New) The method of claim 135, wherein
the reagent suppresses the protease activity in a
reversible manner.

159. (New) The method of claim 135, wherein
the reagent is a compound of formula 1:



FORMULA 1

wherein:

n is 1 or 2;

R¹ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl,
5 (substituted)phenyl, phenylalkyl,
(substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl
or (CH₂)_mCO₂R⁴, wherein m=1-4, and R⁴ is as defined
below;

R² is a hydrogen atom, chloro, alkyl, cycloalkyl,
10 (cycloalkyl)alkyl, phenyl, (substituted)phenyl,
phenylalkyl, (substituted)phenylalkyl, heteroaryl,
(heteroaryl)alkyl or (CH₂)_pCO₂R⁵, wherein p=0-4, and R⁵
is as defined below;

R³ is a hydrogen atom, alkyl, cycloalkyl,
15 (cycloalkyl)alkyl, phenylalkyl, or
(substituted)phenylalkyl;

R⁴ is a hydrogen atom, alkyl, cycloalkyl,
(cycloalkyl)alkyl, phenylalkyl, or
(substituted)phenylalkyl;

20 R⁵ is a hydrogen atom, alkyl, cycloalkyl,
(cycloalkyl)alkyl, phenylalkyl, or
(substituted)phenylalkyl;

A is a natural and unnatural amino acid;

B is a hydrogen atom, a deuterium atom, alkyl,
25 cycloalkyl, (cycloalkyl)alkyl, phenyl,

(substituted)phenyl, phenylalkyl,
(substituted)phenylalkyl, heteroaryl,
(heteroaryl)alkyl, halomethyl, CH_2ZR^6 , $\text{CH}_2\text{OCO}(\text{aryl})$, CH_2
OCO(heteroaryl); or $\text{CH}_2\text{OPO}(\text{R}_7)\text{R}_8$; where Z is an oxygen
5 or a sulfur atom;

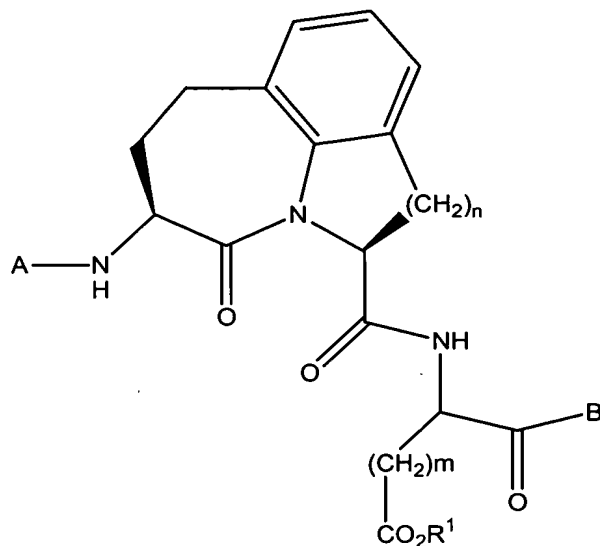
R^6 is phenyl, substituted phenyl, phenylalkyl,
substituted phenylalkyl, heteroaryl, or
(heteroaryl)alkyl; and

R^7 and R^8 are independently selected from a group
10 consisting of alkyl, cycloalkyl, phenyl, substituted
phenyl, phenylalkyl, (substituted phenyl) alkyl, and
(cycloalkyl) alkyl; and

X and Y are independently selected from the group
consisting of a hydrogen atom, halo, trihalomethyl,
15 amino, protected amino, an amino salt, mono-substituted
amino, di-substituted amino, carboxy, protected
carboxy, a carboxylate salt, hydroxy, protected
hydroxy, a salt of a hydroxy group, lower alkoxy, lower
alkylthio, alkyl, substituted alkyl, cycloalkyl,
20 substituted cycloalkyl, (cycloalkyl)alkyl, substituted
(cycloalkyl)alkyl, phenyl, substituted phenyl,
phenylalkyl, and (substituted phenyl)alkyl;

or a pharmaceutically acceptable salt thereof.

160. (New) The method of claim 135, wherein
25 the reagent is a compound of formula 3:



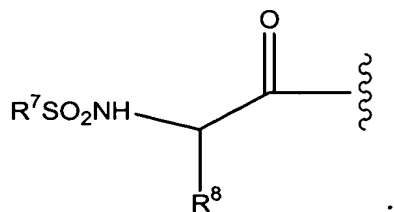
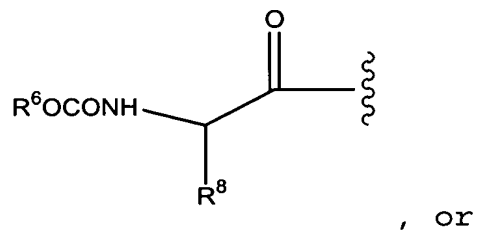
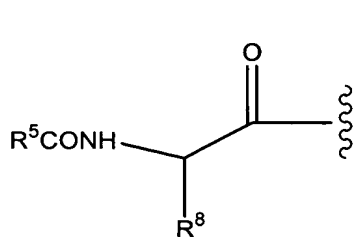
FORMULA 3

wherein:

n is 1 or 2;

m is 1 or 2;

5 A is R^2CO- , $R^3-O-CO-$, or R^4SO_2- , a group of the formula:



further wherein:

R¹ is a hydrogen atom, alkyl or phenylalkyl;

R² is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl,
phenylalkyl, substituted phenyl, (substituted
5 phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R³ is alkyl, cycloalkyl, (cycloalkyl)alkyl,
phenylalkyl, or (substituted phenyl)alkyl;

R⁴ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl,
phenylalkyl, substituted phenyl, (substituted
10 phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R⁵ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl,
phenylalkyl, substituted phenyl, (substituted
phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

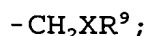
R⁶ is alkyl, cycloalkyl, (cycloalkyl)alkyl,
15 phenylalkyl, or (substituted phenyl)alkyl;

R⁷ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl,
phenylalkyl, substituted phenyl, (substituted
phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R⁸ is an amino acid side chain chosen from the
20 group consisting of natural and unnatural amino acids;

B is a hydrogen atom, a deuterium atom, alkyl,
cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl,
substituted phenyl, (substituted phenyl)alkyl,
heteroaryl, (heteroaryl)alkyl, or halomethyl;

25 a group of the formula:

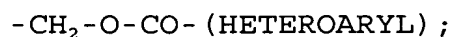


wherein R^9 is phenyl, substituted phenyl, phenylalkyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl; and X is an oxygen or a sulfur atom;

5 a group of the formula:



a group of the formula:



a group of the formula:

10 $-\text{CH}_2-\text{O}-\text{PO}(\text{R}^{10})\text{R}^{11}$ wherein R^{10} and R^{11} are

independently selected from a group consisting of alkyl, cycloalkyl, phenyl, substituted phenyl, phenylalkyl and (substituted phenyl) alkyl; and the pharmaceutically-acceptable salts thereof.

15